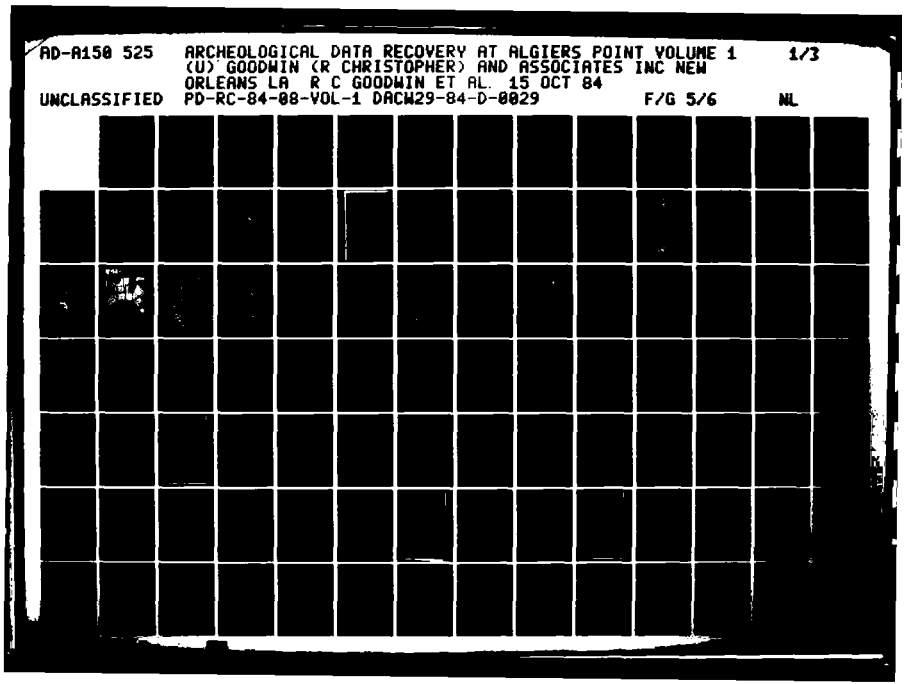
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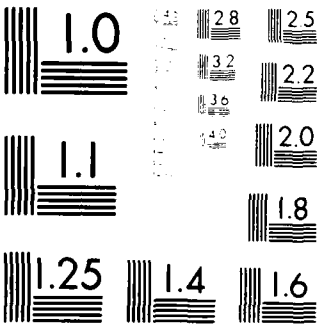

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REPORT NO. PD-RC-84-08

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ARCHEOLOGICAL DATA RECOVERY AT ALGIERS POINT

VOLUME I

R. CHRISTOPHER GOODWIN AND ASSOCIATES, INC.
1306 BURDETTE STREET
NEW ORLEANS, LOUISIANA 70118

15 OCTOBER 1984

FINAL REPORT

PREPARED FOR:

DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT,
CORPS OF ENGINEERS
P. O. BOX 60267
NEW ORLEANS, LOUISIANA 70160

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

Archeological data recovery was undertaken in the Algiers Point Historic District, Orleans Parish, Louisiana, pursuant to a MOA governing historic resources in the Algiers Point Levee Setback Project area. This document reviews the prosecution and results of all cultural resources investigations. Field investigations and their results are summerized; laboratory procedures and the nature of analyses of remains from the project area are discussed.

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in chapters on artifact classification, chronology, and on testing the archeological record.

A primarily late nineteenth and early twentieth century assemblage is defined, and a complete paradigmatic classification of historic ceramics from Algiers Point is presented. Components and sub-assemblages are dated, using mean ceramic dates and bracketed glass dates.

Functionally defined subassemblages are compared using descriptive statistics, in order to elucidate behavioral differences between different and similar classes of features. Status differentials between components are examined, using ceramic prices indexing and descriptive statistics. Finally, the research program at Algiers Point is evaluated against a model of the hierarchial levels of archeological interpretation. Weaknesses in method and theory are reviewed, and approaches utilized in this report are summarized.

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CHAPTER I
INTRODUCTION

This report presents the results of archeological data recovery within the Algiers Point Levee Setback project area of the Algiers Point Historic District, Orleans Parish, Louisiana (Figure 1). This data recovery effort was undertaken pursuant to a Memorandum of Agreement (MOA) between the U.S. Army Corps of Engineers, New Orleans District; the Louisiana State Historic Preservation Officer; and, the Advisory Council on Historic Preservation. That MOA was ratified on November 14, 1983.

This document reviews the prosecution and results of all cultural resources investigations in and pertaining to the Algiers Point Levee Setback project area. Archival and background research, field investigations, analyses of recovered data, and cultural resources management conclusions formulated on the basis of these project stages, are outlined below.

The first section of this report documents the history of the Algiers Point data recovery program. Archival and historical research pertaining to the project area then are synthesized, in order to provide historical context to the data base under investigation, as well as to outline the settlement history of the subject area. The research design contained in the data recovery plan prepared by the U.S. Army Corps of Engineers, New Orleans District, is reviewed. Field investigations and their results are summarized; and, laboratory procedures and the nature of analyses of remains from the project area are discussed in succeeding chapters on artifact classification, chronology, and on testing the archeological record at historic Algiers Point.

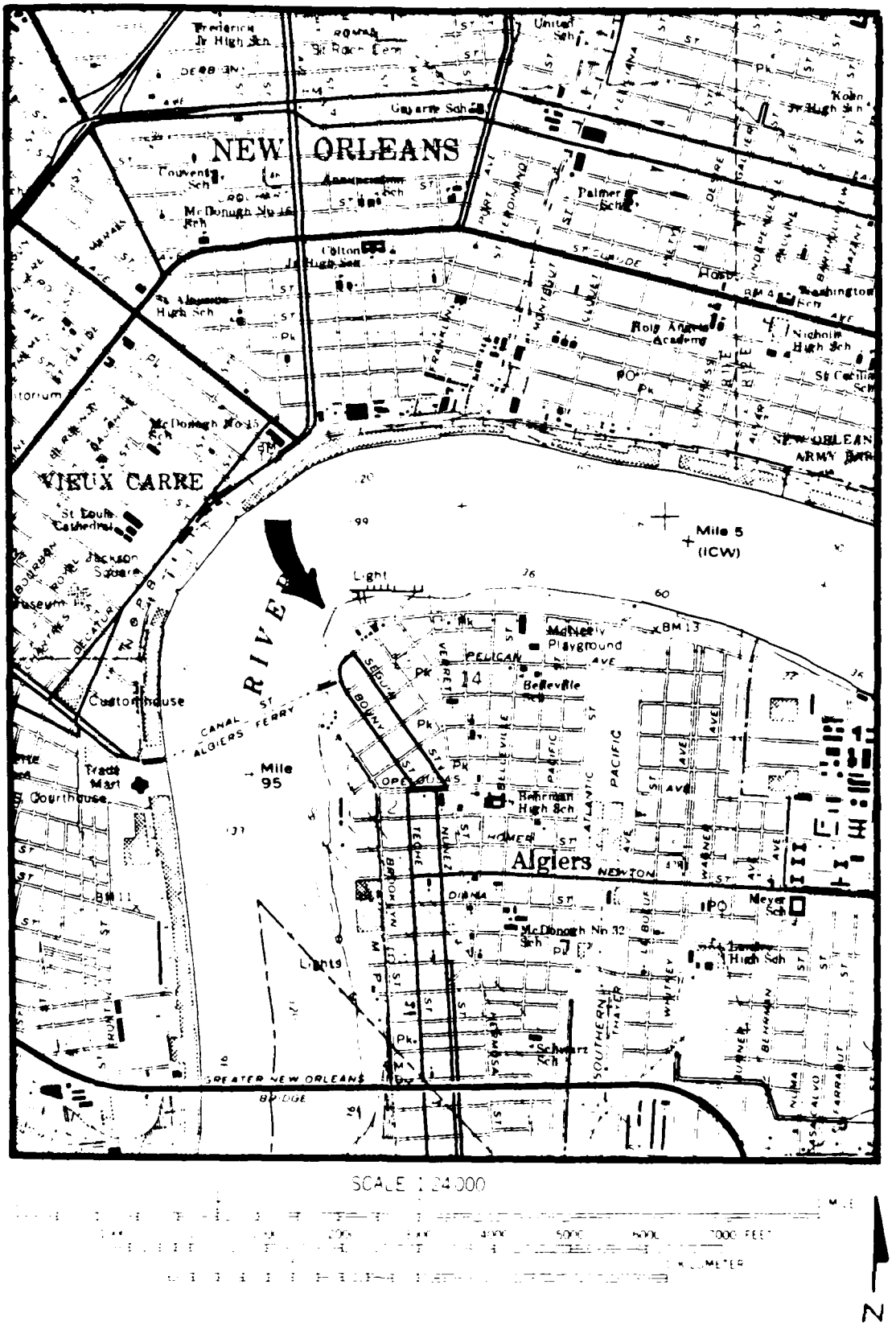


Figure 1. Excerpt of 1979 USGS 7.5 minute New Orleans East quadrangle, showing the Algiers Point Project area.

CHAPTER II
PROJECT HISTORY

The Algiers Point Historic District is located in Orleans Parish, on the right descending bank of the Mississippi River at mile 94.4 (Figure 2). Algiers Point is located on an old point bar of the Mississippi River directly across from the Vieux Carre, the Historic French Quarter of New Orleans. Algiers initially was settled in 1718 by early French colonists, and today it is home to the large scale ship repair and dry dock facilities that support the Port of New Orleans.

The Algiers Point Historic District was nominated to the National Register of Historic Places by representatives of the Algiers Point Association in 1977. During federal review of this Historic District nomination, the U.S. Army Corps of Engineers, New Orleans District, began planning for a proposed levee setback within the boundaries of the nominated district. Pursuant to Sections 106 and Section 110 of the National Historic Preservation Act of 1966, as amended; to Executive Order 11593, "Protection and Enhancement of the Cultural Environment"; to the Archeological and Historic Preservation Act of 1974; and, to the "Procedures for Protection of Historic and Cultural Properties" (36 CFR 800), upon official recognition of the Algiers Point Historic District in 1981, the U.S. Army Corps of Engineers, New Orleans District, initiated determination of effects of their planned levee setback project. An initial historical resources assessment of the Algiers Point project area was conducted by the Department of the Interior, National Park Service, Denver Service Center, Agreement LMPD-82-3. A report detailing the results of that research effort, entitled Algiers Point Historical Resources Assessment, and authored by the late Nick Scrattish, formerly of the Denver Service Center, was submitted on August 1, 1982.

This assessment was based on archival and secondary source research, and on historic map evaluations using 18th, 19th and 20th century cartographic sources. This report presented an historic overview of human occupation on Algiers Point from the aboriginal period to the present. Historic periods such as the Colonial period, the subsequent American period, the Civil War era, and the period of industrial development received individual attention in this report. Thematic topics such as immigration, patterns of land tenure, subsistence, plantation agriculture, and industrialization and abandonment also were emphasized.

In April, 1983, a preliminary case report and a proposed Memorandum of Agreement were submitted to the Advisory Council on Historic Preservation for review and comment. Because of the general nature of the Scrattish (1982) assessment, a more detailed square and lot specific historic review of the levee setback project area was commissioned by the U.S. Army Corps of Engineers, New Orleans District. Two months after submission of the proposed Memorandum of Agreement, a preliminary draft report entitled Algiers Point: Historical Ambience and Property Analysis of Square Ten, Thirteen and Twenty, with a View Toward

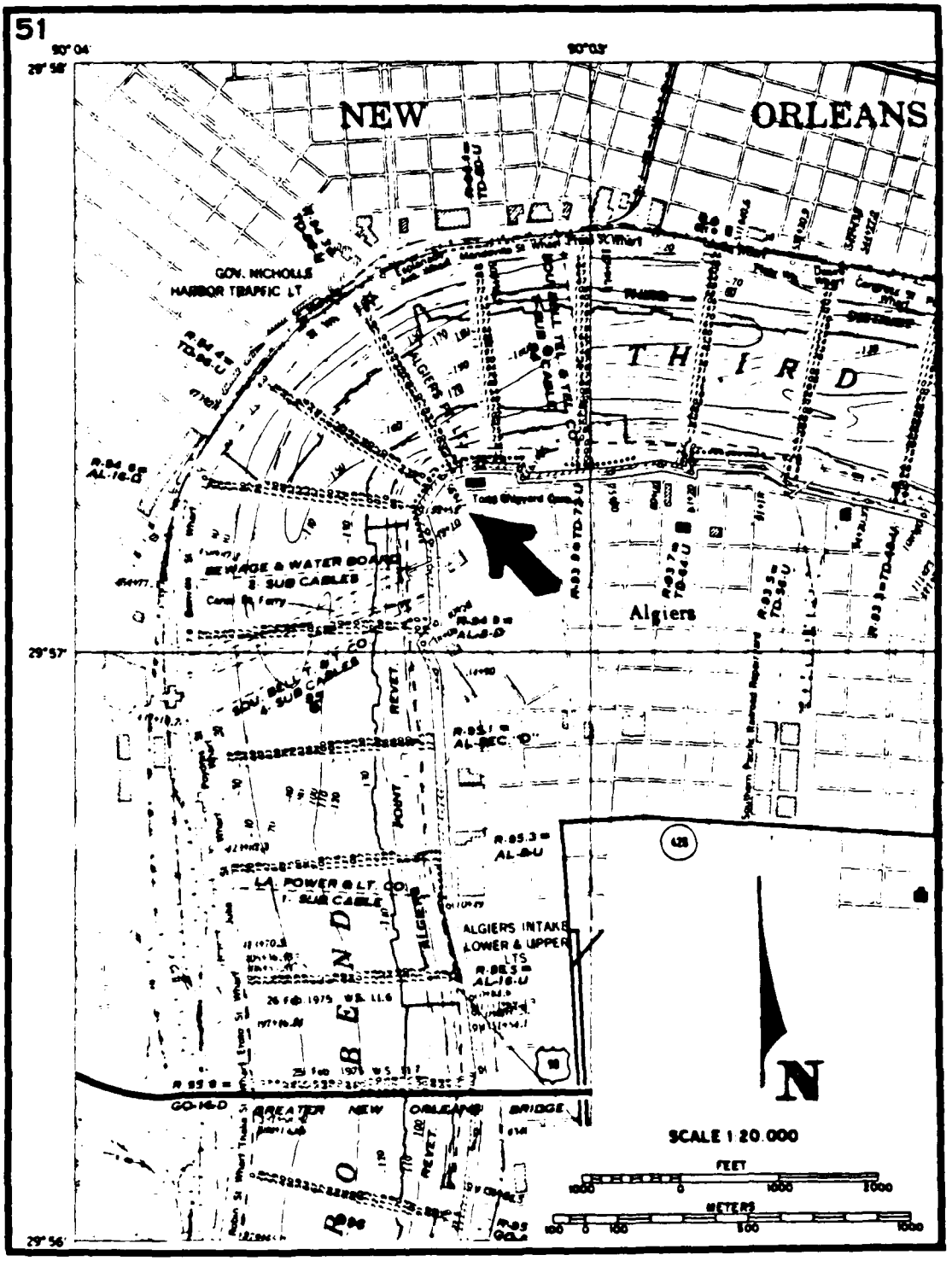


Figure 2. Excerpt of Mississippi River Hydrographic Survey 1973-1975, Chart 51.

their Archeological Potential, was submitted by David L. Fritz and Sally K. Reeves in partial fulfillment of Agreement LMPD-83-17. The primary goal of this research effort was documentation of historical land tenure for the individual squares, or city blocks, contained within the project area, and for specific squares and lots within those squares. Primary and secondary sources, conveyance records, family succession records, Notarial Acts, and historic map data were utilized in the preparation of this report.

Data from both of these aforecited reports were utilized by the Corps of Engineers, New Orleans District, in the preparation of a research design intended to structure further cultural resources investigations within the project area. This research design was included in a Data Recovery Plan that generated a set of expectations pertaining to the nature of remains and to identified historic themes to be addressed during mitigation activities. The dual objective of this plan was the recovery of a viable and representative sample of archeological remains from the project area, and the elucidation of key cultural and historical trends and processes. In addition, the first stage of field work was scheduled for Square 21 (Figure 3), where backhoe trenching was to be applied in order to identify unknown cultural resources not covered in the preliminary draft submitted by Fritz and Reeves (1983). Archeological excavations in Square 10, Lots 6 and 8; Square 13, Lots 1, 2, 13, and in the so-called "Church Lot" (Figure 3), were designed to sample known cultural resources.

Archeological fieldwork was begun by the Corps of Engineers, New Orleans District; in August, 1983, four temporary field archeologists were hired by the New Orleans District. Three additional temporary field archeologists were hired in October, 1983, to augment the existing NOD field crew. Fieldwork subsequently was terminated in December, 1983, due to personnel cutbacks by the Corps of Engineers, New Orleans District.

After consultation with the Louisiana State Historic Preservation Officer, it was determined to complete the archeological investigations at Algiers Point. Remaining fieldwork, technical analyses, and report preparation for the entire Algiers Point Data Recovery project subsequently were assigned to R. Christopher Goodwin & Associates, Inc., under the terms of Contract DACW 29-84-D-0029. Fieldwork in Square 10, Lots 6 and 8 (Figure 3), was begun on March 8, 1984, and it was completed on March 28, 1984. Table 1 presents a chronology of project milestones for the Algiers Point Data Recovery effort.

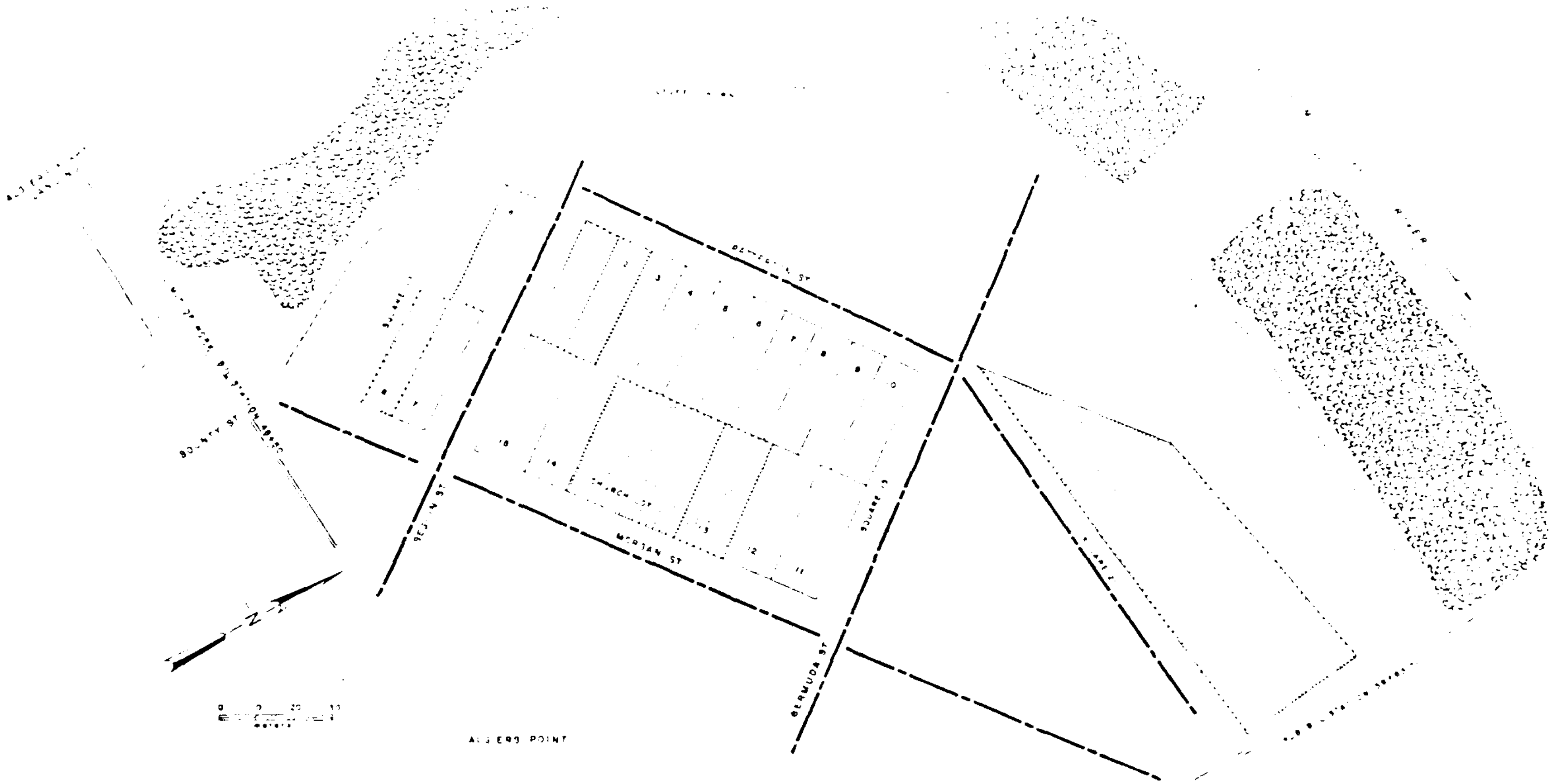


Figure [illegible]. Plan of Algiers Point Project area showing the locations of Squares [illegible], [illegible], and [illegible], and of lots in those squares.

TABLE 1. Chronology of Project Milestones, Algiers Point Data Recovery.

Date	Milestones
10/26/77	Nomination form for National Register of Historic Places completed for Algiers Point Historic District.
1978-1979	Initial scanning and scheduling of cultural resources investigations by U.S. Army Corps of Engineers, New Orleans District.
07/20/81	Initiation of determination of effects of levee setback effects on Algiers Point Historic District, by U.S. Army Corps of Engineers, New Orleans District, after formal recognition of Historic District status.
08/05/81	Cultural resources investigations scheduled for Algiers Point Historic District.
09/16/82	Final draft Algiers Point Historical Resources Assessment submitted by Nick Scrattish, National Park Service, Western District, Denver Service Center.
04/27/83	U.S. Army Corps of Engineers, New Orleans District, submitted Preliminary Case Report and proposed Memorandum of Agreement between U.S. Army Corps of Engineers, NOD; Louisiana State Historic Preservation Officer, Robert DeBlieux; and the Advisory Council on Historic Preservation.
06/14/83	Advisory Council on Historic Preservation reviews and comments on Preliminary Case Report and proposed Memorandum of Agreement.
06/17/83	Preliminary draft, Algiers Point: Historic Ambience and Property Analysis of Squares 10, 13, and 20, with a View Toward Their Archeological Potential , submitted by Fritz & Reeves to U.S. Army Corps of Engineers, New Orleans District.
06/24/83	Letter from Robert Deblieux, Louisiana State Historic Preservation Officer, to Cletus Wagahoff, Head of Planning Division, U.S. Army Corps of Engineers, NOD. Management Summary will allow state office to determine if impacts to significant deposits have been mitigated after Management Summary review.

07/05/83	U.S. Army Corps of Engineers, New Orleans District, hires four archeologists to implement Algiers Point Data Recovery program.
08/29/83	Archeological fieldwork begun by U.S. Army Corps of Engineers, NOD, in Square 21, Algiers Point.
10/19/83	Archeological fieldwork begun in Square 13, the "Church lot," by U.S. Army Corps of Engineers, New Orleans District, personnel.
10/14/83	Three additional archeologists hired by Corps of Engineers, NOD, to augment field crew for completion of Algiers Point Data Recovery program.
11/14/83	Memorandum of Agreement ratified.
11/16/83	Archeological fieldwork begun in Square 13, Lot 13, by U.S. Army Corps of Engineers, New Orleans, District.
11/20/83	Archeological fieldwork begun in Square 13, Lots 1 and 2, by U.S. Army Corps of Engineers, New Orleans District.
12/23/83	Field work terminated by U.S. Army Corps of Engineers, NOD, due to FTE cutbacks.
02/01/84	After consultation with the Louisiana State Historic Preservation Officer, U.S. Army Corps of Engineers determines to complete archeological excavations terminated December, 23, 1983.
02/20/84	R. Christopher Goodwin & Associates, Inc., contracted by U.S. Army Corps of Engineers, NOD, to complete Algiers Point Data Recovery Project
03/08/84	Archeological field work initiated in Square 10, Lot 8.
03/28/84	Archeological field work completed in Square 10, Lot 6.
04/16/84	Executive Summary of Algiers Point Data Recovery submitted to U.S. Army Corps of Engineers, NOD, Planning Division

07/16/84	Preliminary Draft Report submitted to U.S. Army Corps of Engineers, NOD.
10/15/84	Final Draft Report, Algiers Point Data Recovery, due to U.S. Army Corps of Engineers, NOD.

CHAPTER III
HISTORIC SETTING

Historic background documentation of the Algiers Point project area was accomplished in three stages. Research emphases varied from a generalized historical approach in stage one to reconstruction of specific square and lot histories in stage two. In depth research of specific lot histories designed to fill gaps in existing data and to clarify lot chronologies was conducted during stage three of archival research. The late Nick Scrattish, formerly of the National Park Service, Western Division, Denver Service Center, conducted stage one research beginning in Fall, 1982. This effort was designed to assess all possible cultural resources contained within the project area. Stage two research was conducted by David L. Fritz and Sally K. Reeves in Spring, 1983, after review and assessment of Dr. Scrattish's research. Staff archeologists from the U.S. Army Corps of Engineers, New Orleans District, conducted third stage archival and historical research in July, 1983, after submittal of the Fritz and Reeves (1983) preliminary draft report. Third stage research was confined to clarification of theretofore incomplete individual lot chronologies, and to research specifically pertinent to Square 21. This square replaced Square 20 in the inventory of historic properties to be investigated during data recovery.

Archival and historical research by Nick Scrattish (1982) resulted in the heuristic formulation of a four period chronology of Algiers Point history. The first period, the European Colonial period, began in 1718 and lasted until 1804. The second period, characterized by Scrattish (1982) as that of settlement and urbanization, began in 1805 just after the Louisiana Purchase, and ended in 1839. the year of the subdivision of the Duverje Plantation. The third period, one of intensified urbanization and industrialization, began in 1834 and, according to Scrattish (1982), lasted until 1977. The fourth period, from 1977 to the present, simply represents current occupation and land use.

The initial, or Colonial period, began with French settlement of New Orleans. In 1718, Sieur de Bienville established New Orleans under the auspices of the French crown. The surrounding area then was partitioned through land grants, known as concessions, and these partitions immediately preceded the first documented settlement of Algiers Point ca. 1719 (Figure 4). The concession that contained Algiers Point was granted to Bienville (Figure 5). A French powder magazine, constructed ca. 1731 (Figure 6), subsequently was lost to erosion by the Mississippi River (Scrattish 1982).

French control of Louisiana ended in 1769, when Spain took possession of all Louisiana. In 1770, the Spanish Governor deeded ownership of all land on Algiers Point between present-day Verret Street and the "Upper Line" to Louis Borepo. Land ownership changed hands several times during the remainder of the century, until, in 1805, much of the Algiers Point property was purchased by Barthelemy Duverje for $18,000.00.

Figure 4. Serigny's ca. 1719 map of Algiers Point. In P. Thomassy, 1860, Geologie Pratique de la Louisiane.

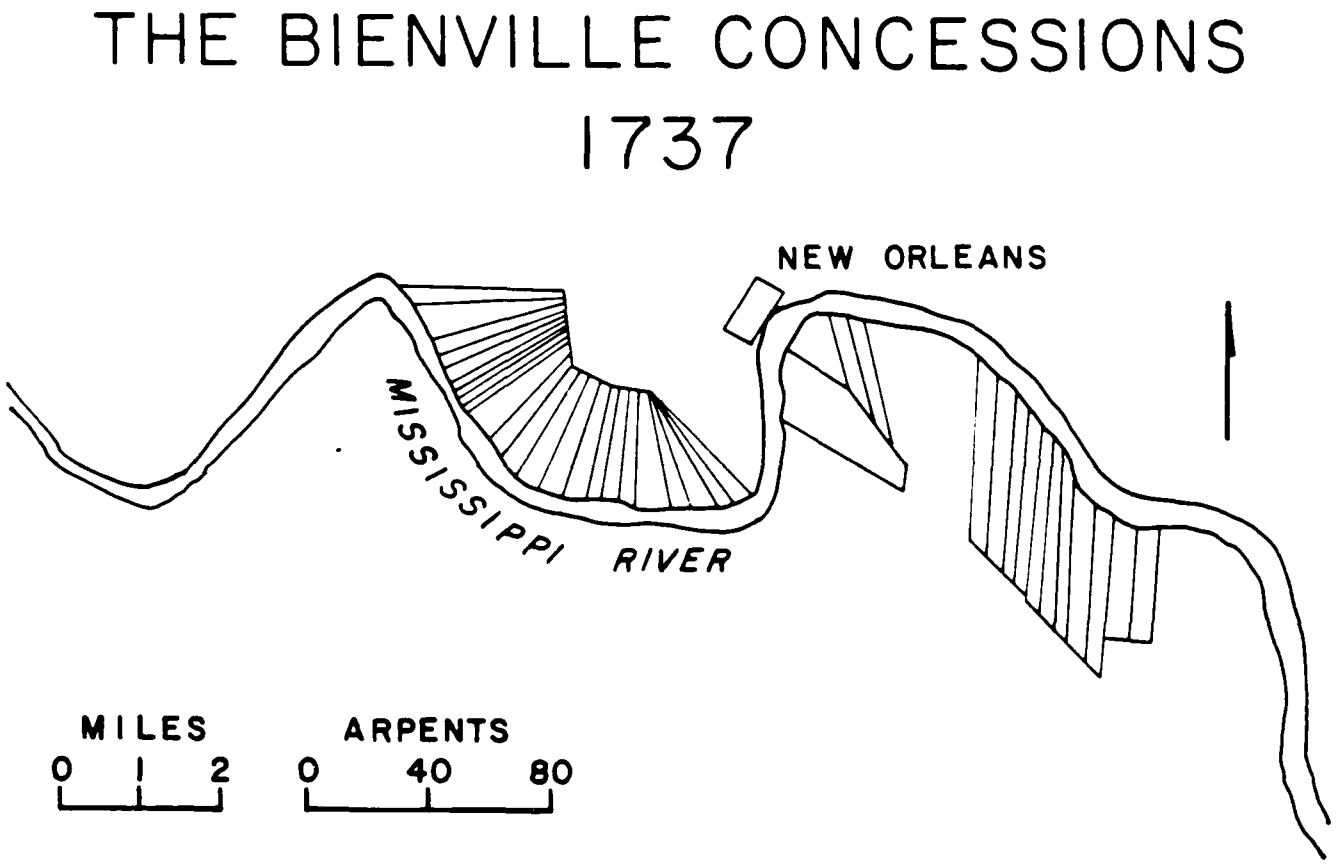


Figure 5. The Bienville Concessions. (Scrattish 1982:4b).

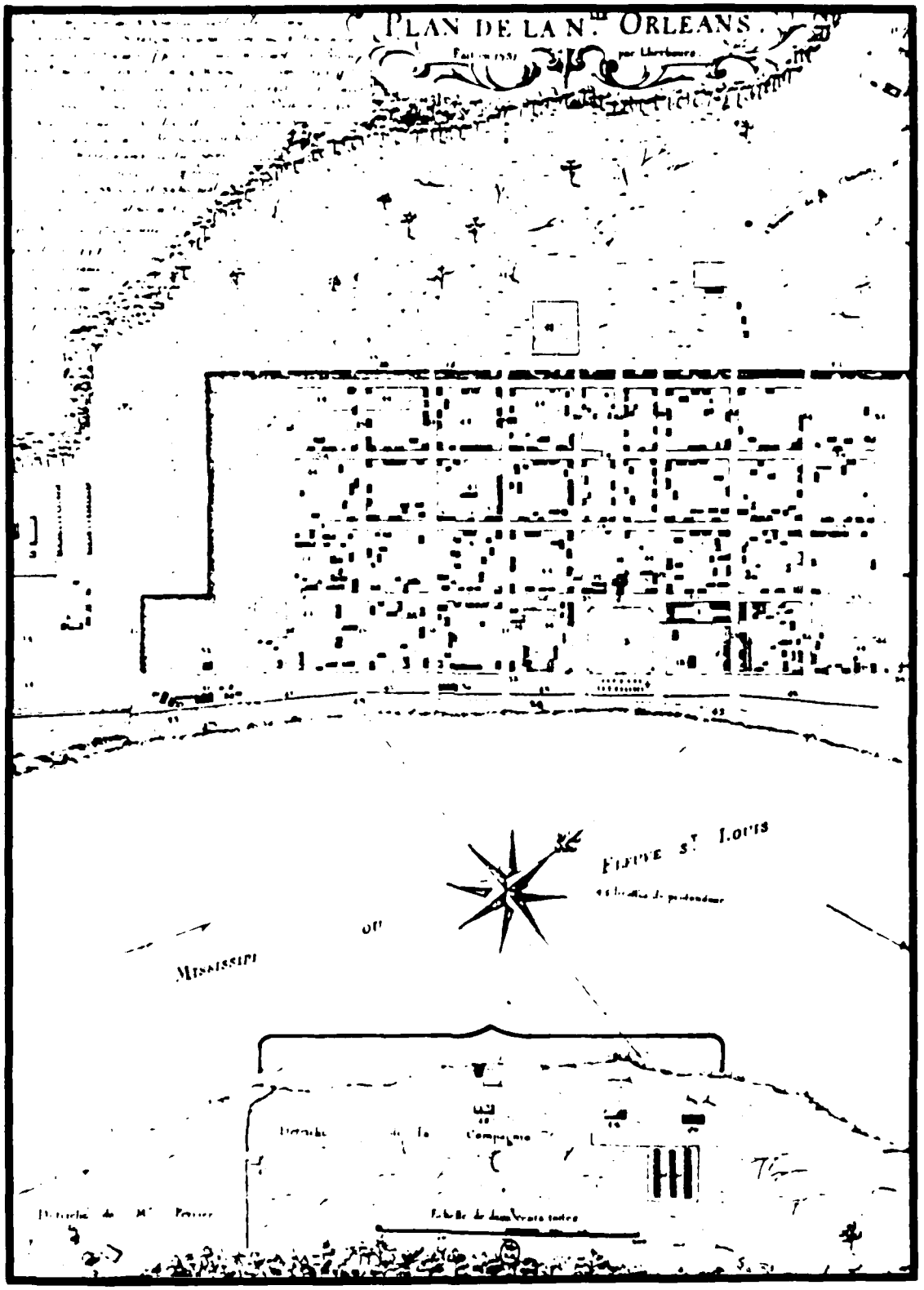


Figure 6. 1731 Plan de la Nouvelle Orleans, showing munitions buildings on the west bank. (Historic New Orleans Collection).

The acquisition by Barthelemy Duverje of the tract that was to bear his name marks the beginning of the second period of Algiers Point history. Lafon's 1816 plan and Vecchio and Maspero's 1817 Plan of New Orleans both show the configuration of the Duverje plantation (Figures 7 and 8).The construction date of Duverje's home has been placed variously by Scrattish (1982) as 1812, and by Fritz and Reeves (1983) as 1816. That great house was built in a West Indian architectural style prevalent during the period (Figure 9). The house burned in the Great Algiers Point fire of 1895 (Scrattish 1982:8; Fritz and Reeves 1983:91).

Duverje's economic enterprises were diversified. Rather than pursuing sugar monocrop agriculture, Duverje grew vegetables on his estate; he operated a commercial brickyard on the present site of Square 21; and, he raised cattle and operated several slaughter houses located at various points along the riverside edge of his property. Early in 1819, Duverje had a subdivision of his estate drawn. Shortly thereafter, he donated batture land for the establishment of a shipyard. He died in 1820, and his widow, Alix Duverje, sold improved lots in Squares 1, 2, 9, and 10 (Figure 10). In 1837, Mrs. Duverje auctioned lots in Squares 9, 10, 11, 13, and 14. These auctions established the subdivion of the former plantation holdings in what had become known as "Duverjeville" (Fritz and Reeves 1983:92-97). Mrs. Alix Duverje died in 1839, ending the second period of Algiers Point history. During the Duverje ownership, subdivision and sale of these plantation lands set the stage for intensive urbanization and industrialization of the project area.

The third period of Algiers Point history was characterized by an influx of European immigrants. These families bought or leased lot properties, essentially founding a working class residential neighborhood on Algiers Point. The economy of the area was tied closely to the burgeoning ship building, dry dock, and repair industry there. Further economic development was spurred by the location of railroads just downriver from the Point, and especially by Morgan's Louisiana and Texas Railroad and Steam Company which maintained large railroad yards and steam locomotive repair facilities nearby.

As noted previously, Scrattish (1982) lumped the nearly 140 years of urban and industrial growth on Algiers Point into one macro developmental period. This inability to distinguish intervening periods and trends resulted in an insufficient level of historic specificity for archeological retrodiction. In addition, the growth of residential neighborhoods on Algiers Point during this period required a change in the focus of historical interest to encompass individual squares and lots, if significant trends and data bases were to be addressed. The Fritz and Reeves (1983) report was designed to provide this refined perspective. That report, which treated the individual units of land tenure, had eight research objects. Fritz and Reeves (1983) sought to establish dates of subdivison; land ownership; dates of initial construction thereon; ethnicity and status of residents; trends in property ownership; economic uses

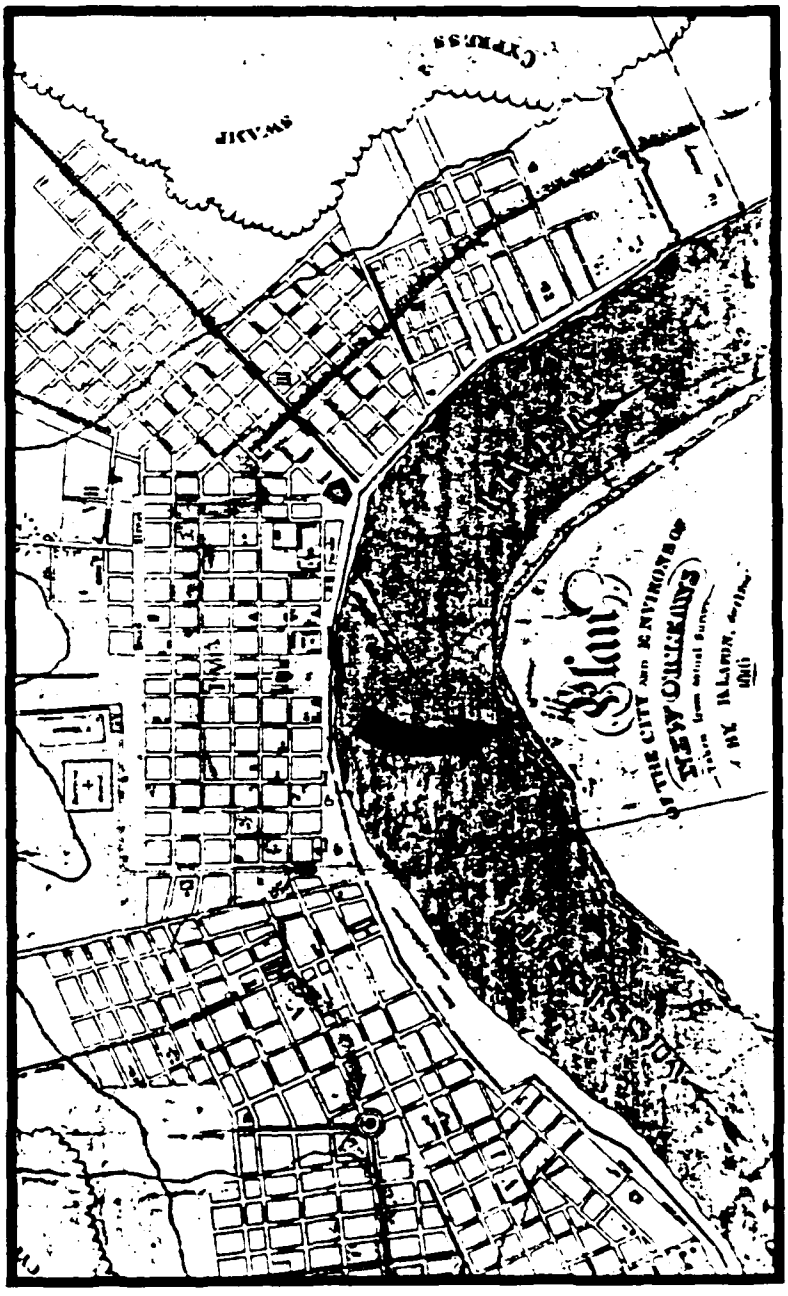


Figure 7. Lafon's 1816 map, City and Environs of New Orleans, showing the configuration of the Duverje Plantation. (Historic New Orleans Collection).

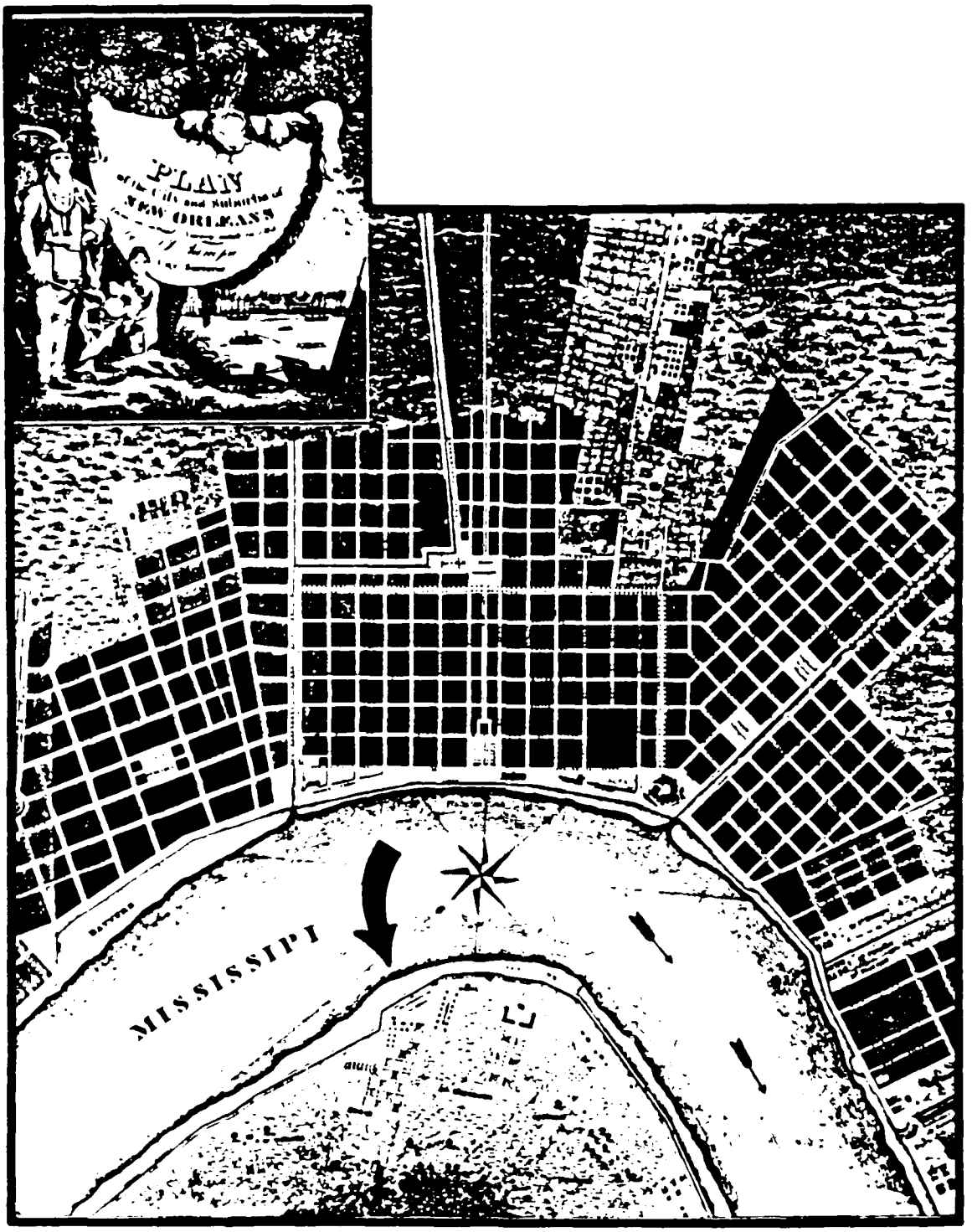


Figure 8. Vecchio & Maspero's 1817 plan of New Orleans, showing the configuration of the Duverje Plantation. (Historic New Orleans Collection).

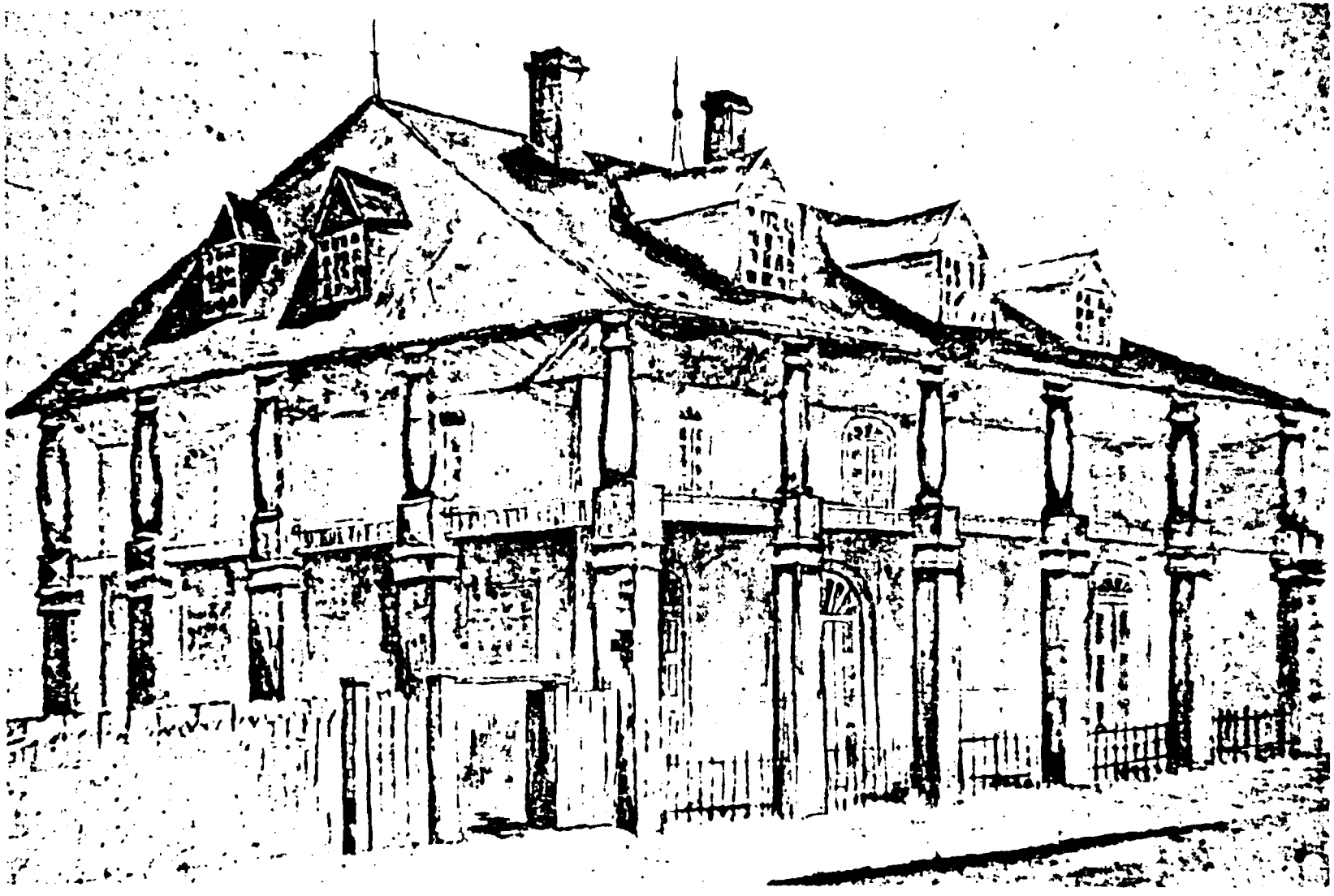


Figure 9. The Duverje Home ca. 1812. (Historic New Orleans Collection).

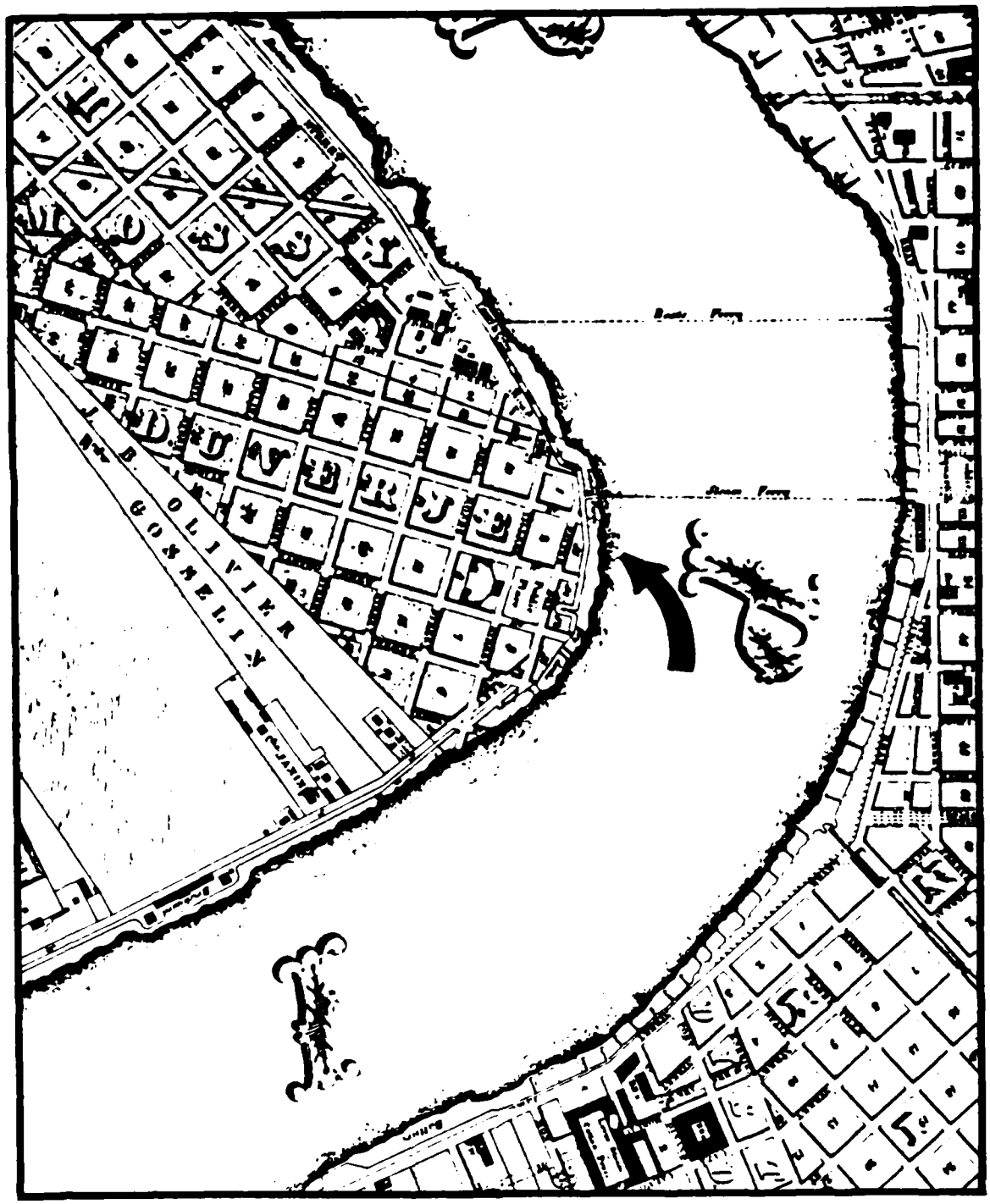


Figure 10. Zimple's Topographic Map of New Orleans and its Vicinity, 1834, showing the subdivision of the Duverje Plantation.

of the lots; and, broad development trends on Algiers Point.

For the third period of Algiers Point history, then, it is appropriate to focus discussion on the individual lot histories. These lots are shown in Figure 3. Lot histories for Square 13, lots 1, 2, 13, and the "Church Lot"; for Square 10, lots 6 and 8; and, for Square 21 are summarized briefly below. These squares and lots represent those selected for archeological data recovery, based on archival data (Fritz and Reeves 1983) and on criteria established in the researach design of the archeological data recovery plan.

Square 13

At the time Barthelemy Duverje had the subdivision plans for his property drawn in 1819, he intended that Square 13 in front of his home be maintained as a public place. Despite this, after Duverje's death two "wooden houses and kitchens" were constructed on the property; these structures were built prior to 1839 (Fritz and Reeves 1983:98). In 1850, Square 13 was partitioned among the Duverje heirs, and divided into sixteen lots.

Lots 1 and 2

The Attakapas Hotel was built on lots 1 and 2 in 1838. Apparently, the hotel had been removed by 1850, since no mention of it was made when the lots were received by Octavie Duverje as her portion of the aforementioned partition. Octavie Duverje constructed a one and a half story frame cottage on Lots 1 and 2. This cottage also was used as a coffee house. A kitchen, a privy, and a cistern, also were constructed on the property. Ocatvie Duverje maintained the area as rental property for the next fifteen years. During this time, the New Orleans City Directory lists a coffee house on one of the corners of Patterson and Seguin Streets (Fritz and Reeves 1983:100-101).

Duverje sold her property in 1865 to Henry and Evelina Carter. The latter operated a ship chandlery on the property for three years, and then sold the property to Charles Wilson, Mrs. Carter's stepfather. Wilson opened a hotel there called the "Wilson House." However, within a few months Wilson dona ed the property in question back to the Carters. The Carters made extensive renovations to the existing building on Lots 1 and 2, and opened "The Brooklyn House" as a coffee house/tavern shortly thereafter. On September 30, 1868, the "Brooklyn House" was destroyed by fire. The insurance claim involved litigation, and both the Carters died before their claim was settled. The property was purchased subsequently by John Mahoney, who, in turn sold the property to the mortician Louis Guillaud in 1885. Guillaud sold the property to Felix J. Borne that same year. Borne, a builder, constructed a new two story shop for himself on Lot 1. He sold Lot 2 to the Louisiana Electric Light and Power Company, and that company built a single story office building there.

By the early twentieth century, both lots 1 and 2 were in the possession of Charles G. Oswald, owner of Oswald Iron Works, which later became Southern Marine Works. In 1903, this company had a one story office and a boiler ship on lot 1, and a single story blacksmith's shop and boiler room was present on lot 2. The company changed its name again in 1903 to Union Marine Works. By 1913, both lots were under the control of Sigmund Kohlman of Johnson Iron Works.

Lot 13

Lot 13 went to Francois Alfred Robelot, a Duverje family cousin, in the 1850 partition. A plan of Lot 13 made in 1865 (Figure 11) as part of Robelot's probate inventory shows a frame cottage with "four rooms and a gallery, kitchen containing two rooms, privy and cistern" (Fritz and Reeves 1983:111). This cottage was held by Robelot as a rental property. After Robelot's death, the property was purchased by George Shorey, a wharf builder. Shorey died in 1879, but his widow and children continued to reside there. Sometime shortly before the end of the century, the cottage was replaced by a double shotgun (Figure 12). The Widow Shorey sold the shotgun house in 1906 to Algiers physician William H. Riley. Riley and his family lived there until 1925; the cottage stood on the property at least until 1937 (Fritz and Reeves 1983:111-112).

Church Lot

The Church Lot parcel was not part of the 1850 Duverje partition, because the property was donated to the Catholic archdiocese in 1848 on the condition that a church and a clerical residence be established there. St. Bartholomew's Church, named after the patron saint of Barthelemy Duverje, was built in 1849. It was a small frame structure set on brick piers. It soon proved to be too insubstantial a building, since it was destroyed by a hurricane in 1868. The ruins of the church were completely demolished in 1872, at which point the Duverje family successfully brought suit for revocation of their donation. The judgement in this case was rendered in 1883; no improvements were made on the property between 1872 and 1883.

The Church Lot was sold subsequently at public auction to Louis Guillaud, a mortician. In 1885 Guillaud built a two story, frame structure to house his combined furniture making and mortuary business. Guilluad resided in an upstairs apartment. Stables for Guillaud's horses and structures to shelter his various wagons and hearses also were present on the Church Lot. Ten years later, Guillaud sold his business to Guillaume Mothe, who also maintained an established mortuary business in the French quarter. In 1903, Mothe sold a portion of the lot to the Southern Marine Works, which later, as shown previously, became part of the Johnson Iron Works complex (Figure 13)(Fritz and Reeves 1983:112-115).

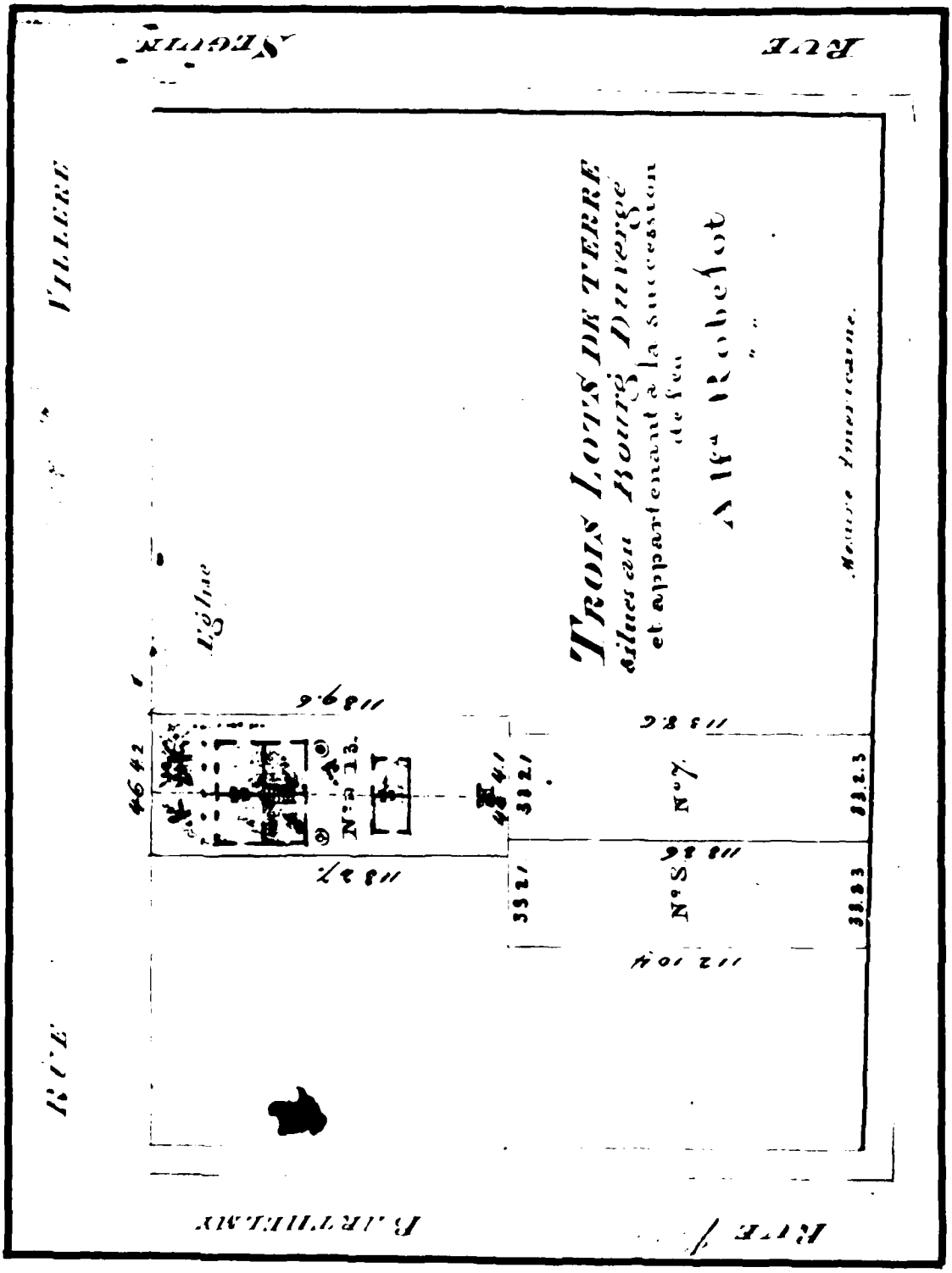


Figure 11. Francois de Paul Alfred Robelot's Plan of Square 13, attached to Duverje Estate Inventory of 1865. (New Orleans Notarial Archives).

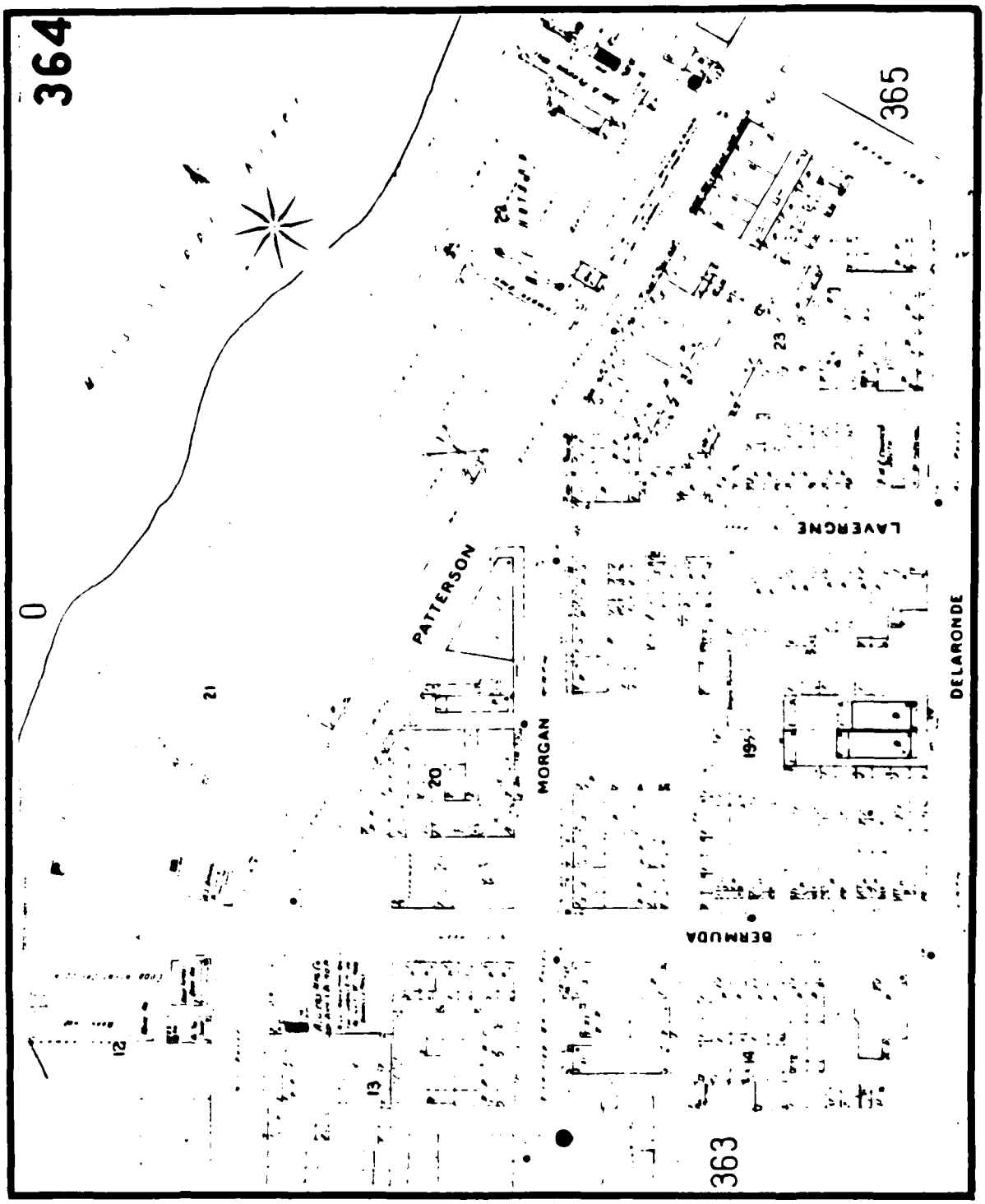


Figure 12. 1896 Sanborn Insurance Map, Plate 364, showing the distribution of standing structures in the project area prior to the turn of the century.

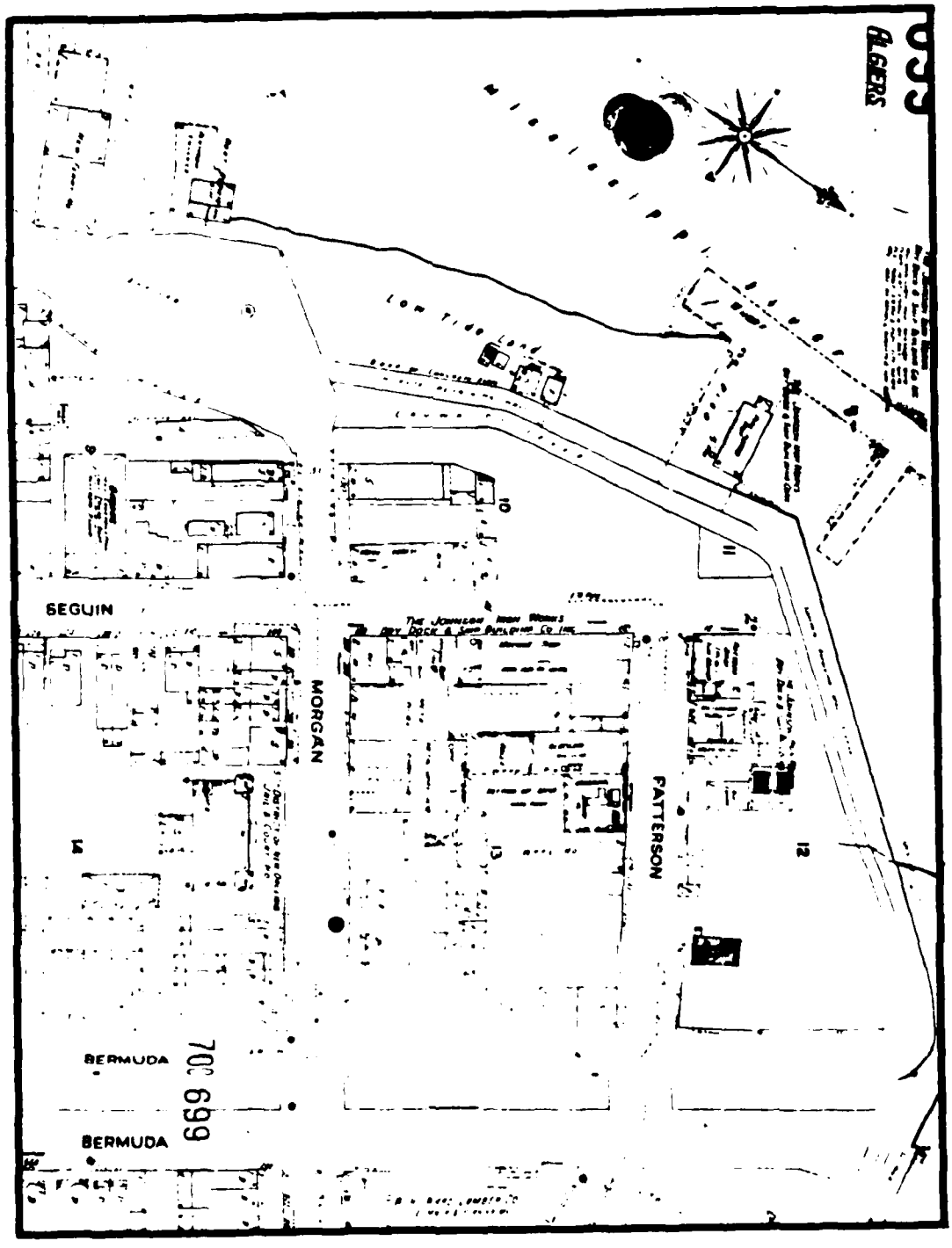


Figure 13. 1909 Sanborn Insurance Map, Plate 699, showing early twentieth century distribution and nature of standing structures in the project area.

Square 10

Square 10 formerly was numbered Square 2 (Fritz and Reeves 1983:117). Much of this lot's former extent has been lost to the Mississippi River. Throughout its history the landing for the Second District Ferry to the Vieux Carre was located on Square 10. The square once contained homes of skilled artisans. Like the former boatyard of John Mahoney, these also have been lost to the encroaching river.

Square 10, Lot 6

Background documentation for Lot 6 is imprecise, and assignation of lot occupations is tenuous. A baker, Armbrouse Lanbuse, was listed by Fritz and Reeves (1983:120) as residing on Lot 6 in 1840. Ten years later, Cohen's City Directory lists F. Coon, a blacksmith, as resident on the corner of Patterson and Seguin Streets. At a Sheriff's sale in 1858, Joseph Llado bought the property (Fritz and Reeves 1983:120-121). Sanborn Insurance Maps also show three small tenant houses on Lot 6 in 1896 that were destroyed by 1898; these were not discussed in Fritz and Reeves (1983), although they probably were associated with two privies noted in that report (Figure 14). A search of city directories provided no clues to the former tenants of these structures.

Square 10, Lot 8

Louis Tancre, carriage maker and blacksmith, bought Lot 8 in 1856. He sold it to Francois Duvic, a recent immigrant and master blacksmith, in 1860. Duvic stayed on Lot 8 until 1907, and both his residence and his blacksmith shop were located on this property. The property was sold to John Sprada, the owner of Lot 9, in 1914. Mr. Sprada left the property vacant, although it was fenced (Fritz and Reeves 1983:119).

Square 21

Early in the nineteenth century, Square 21 was the location of part of Barthelemy Duverje's brickyard. Despite his widow's hopes to sell the property after Duverje's death, no buyer was interested. The property was leased to John Rust, and the brickyard continued to operate until 1824. By this date, there was a ship building and repair operation partially located on Square 21. The owner was Richard Salter, and in 1824 he went into partnership with Peter Marcy. The latter, a ship builder, became one of Algier's most successful nineteenth century businessmen (Reeves 1983:11-14).

The partners Salter and Marcy leased land in both Squares 21 and 22 from Madame Duverje for their shipyard. By 1839, Salter had left the partnership, and Marcy's new associate was John Bailey. After Madame Duverje's death, Marcy and Bailey continued to rent the land from the Duverje heirs. Improvements

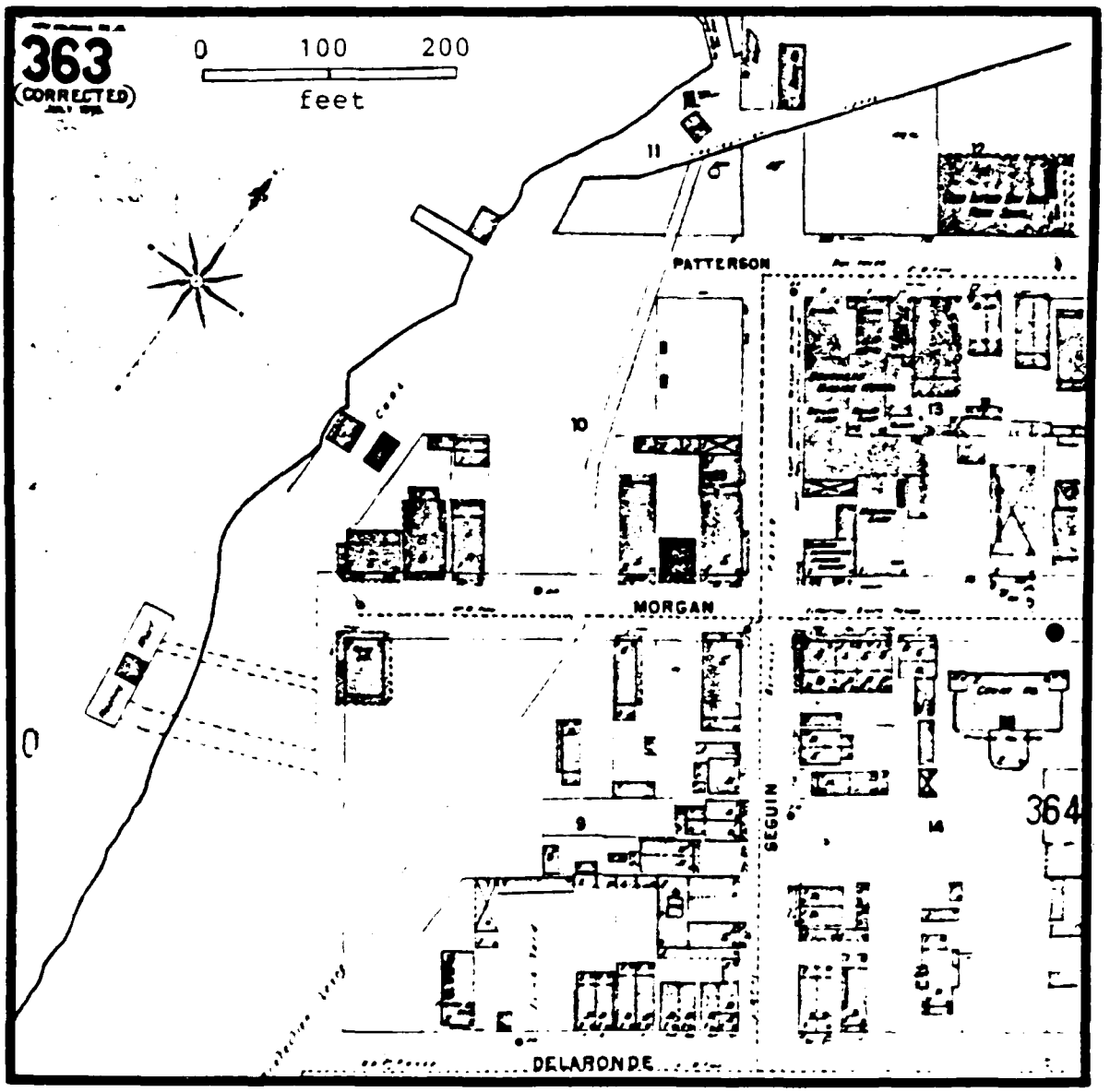


Figure 14. 1898 Sanborn Fire Insurance map, showing two privies in Square 10, Lot 6.

included "Dwellings, coffee houses, and the like," a two story brick house which may have been Salter's home, a kitchen, servant's quarters, sheds, and two smaller dwellings (Reeves 1983:12).

In 1839, Marcy and Bailey acquired a new, larger drydock which enabled them to repair large steamships. They expanded their facility to include part of the shipyard of Joseph Roux, who ran an operation next to Marcy and Bailey in Square 21. When Duverje's heirs held a public auction of lots in Square 21 in 1845, Marcy and Bailey bought four lots on the corner of Bermuda and Patterson Streets. By this date, Marcy and Bailey held a 600 foot shipyard part of which was leased to them by Roux, and they held the brick dwelling formerly owned by Salter.

In 1847, Bailey sold his share of the business to Salter. The act of sale contained a list of movables attached to the shipyard (Fritz and Reeves 1983:96); by this time, there also was a blacksmith's shop on the property. Two years later, Marcy began construction of a 245 foot dry dock. At this time, the Duverje heirs raised the rent on Roux's shipyard from $480 to $1200 per annum; Roux subsequently abandoned that property. The Duverje heirs then offered the property to Marcy at the same rate. They raised Marcy's rent at the same time. When Marcy declined, he was given less than one month to vacate the property, including removal of his new drydock. Marcy was unable to launch the yet unfinished drydock. Following a successful suit by the Duverje heirs, Marcy and Salter thereafter confined their operations to their own property on the upriver side of Square 21. They also had to dispose of the new drydock. The partnership subsequently lost their one remaining drydock in the mid 1850s. At that time, Marcy bought Salter out, and the former gave up the ship repair industry altogether. The partnership of William A. Hyde and Thomas G. Mackie then worked Marcy's shipyard, until their drydock was sunk during the War Between the States.

The importance of the Algiers Point shipbuilding industry increased with the advent of the War Between the States. Of fifteen shipbuilders in the New Orleans area in 1860, at least nine were located in Algiers. The properties in Squares 21 and 22 continued in use as shipyards until they were confiscated by the Union Navy. This area functioned as a Union shipyard toward the end of the war (Reeves 1983:28).

Algiers shipbuilding revived immediately after the war. Marcy rented the yard in Squares 21 and 22 to Spencer Field in August 1865. Field rebuilt a river hayboat into the dry dock "Ocean," and this company operated successfully for a decade until it went bankrupt in 1877. Among their other debts in 1877, Field's company owed nearly one and one half years' rent to Peter Marcy. When Marcy sued, the litigation documents included a discussion of improvements to Marcy's property:

> (the "Ocean" drydock) is connected to shore by piles and small wharves. The land is required for offices, sheds, etc. My former partner (Richard Salter), I think he leased a portion of that land in 1819. It has been a shipyard since that time. The dock can't be worked without the land for repairs of timbers, planks and so on (Reeves 1983:38-39).

Marcy and Ocean Dry Dock's creditors won their suits, and the company was forced into liquidation. Marcy bought the sheds and buildings on his land, which were in poor condition, for less than $500 (Reeves 1983:39).

During this period, the Duverje heirs' land, downriver from Marcy's, also was being utilized as a shipyard. After the War Between the States, the dry dock "Star" began operations off that property. In 1872, the "Marine" dry dock was towed to Square 21 by either the Brady and McLellan Company (Reeves 1983:40) or John O. McLean (Reeves 1983:42). In either case, Brady and McClellan went into business at this locale. In 1877, they leased Peter Marcy's land and expanded their operations. They continued to rent the latter property until Marcy's son and heir, Daniel Peter Marcy, sold the land to the "Good Intent" Dry Dock in 1897 (Figure 15). An independent blacksmith, Albert S. Daniels also ran his shop on Square 21 during this period. Brady and McCllelan sold to the New Orleans Dry Dock and Shipbuilding Company in 1903. This company became part of the Johnson Iron works in 1920.

As these square and lot histories have shown, land use and the configuration of potential archeological remains on Algiers Point spanned a range from residential structures and attendant outbuildings to public houses, businesses such as mortuaries and blacksmiths, and heavy industries such as the Johnson Iron Works. It also can be seen that there is little historic documentation of Square 10, Lot 6. In addition, despite the amount of information available on Lot 21, the historic record in general lacks the degree of specificity necessary to accurate spatial reconstruction. Similarly, and as will be seen, these historic data do not always relate to or explain the remains recovered during excavation. For example, the archeological deposits from Square 10, Lot 8, predate the mid-nineteenth century developments outlined in this chapter. Finally, virtually no artifactual remains were recovered from Square 13, Lots 1 and 2, despite expectations to the contrary. These inconsistencies demonstrate problems inherent in the Direct Historical Approach.

The nature of land tenure in the project area began to change during recent years when major ship building industries left the area. The industrial abandonment of Algiers Point resulted in the occupation of most of the project area by a parking lot consortium that occupied all of Squares 10 and 13,

adjacent to the Algiers Ferry landing. No residential structures remain today in the project area.

CHAPTER IV
RESEARCH DESIGN

The research design for the Algiers Point Data Recovery program was written by staff archeologist of the Corps of Engineers, New Orleans District, in 1983. It was based on the results of archival research presented in the Algiers Point Historical Resources Assessment (Scrattish 1982) and in the preliminary draft report submitted by Fritz and Reeves (1983). These archival reports have been reviewed in the preceding section of this report treating the historic setting. Research objectives derived from these reports were formulated to guide field investigations within the project area. These research objectives are summarized below in Table 2.

With the exception of Square 21, the five properties selected for intensive investigation were chosen because of the perception that they could help fulfill one or more of those research objectives (Table 2). Square 21, however, was investigated because its archival record was incomplete, and the square history was poorly understood. Throughout planning and fieldwork, the individual lots composed the basic analytical unit. Lots tested, then, were selected based on their perceived research potential. Square 13, Lots 1 and 2 were selected because of the presence there of an 1851 - 1868 occupation by Wharton's Coffee House or Tavern, which exemplified a mixed commercial-residential context with associated outbuildings. It was assumed that such establishments were centers of social activity, and that they could provide data on the nature of mixed residential/commercial occupations from the middle of the nineteenth century. Data classes expected included habitation and tavern refuse and structural information from buildings that formerly stood on Lot 1 and 2. Preliminary backhoe trenching was designed to identify and target Wharton Tavern period components for intensive examination using hand excavations.

Square 13, Lot 13 was selected for investigation due to its long history of residential occupations, dating from the antebellum period until the mid twentieth century. Documentary evidence of the locations of former standing structures, their size, configuration, and layout, was used to program the placement of hand units without exploratory testing. Excavations in Lot 13 also were designed to test the archivally-generated assumption that only one structure stood on this lot throughout its occupation sequence, and that this structure was modified after the end of the Robelet occupation in 1865. Other hand excavation units were designed to extract data from the kitchen area of this occupation. Square 13, the "Church" lot, was selected for its perceived ability to yield information on the nature and structure of historic archeological religious activity areas. In addition, subsurface features from the commercial-residential activities of two undertakers were thought to be present in the "Church" lot. If subsequent industrial intrusion from a succession of foundaries were present that had adversely effected previous occupations, artifact classes related to industrialization would be targeted

TABLE 2. Research Objectives Identified in the Data Recovery Plan.

1. Characterize the changing pattern of land use at Algiers Point, beginning with plantation agriculture and proceeding to residential or mixed residential/-commercial, and then to industrial and open space land use.

2. Discrete activity loci from residential, commercial, social, and religious life have been indicated by previous research. Patterning of remains within these areas will be studied and compared to other recently compiled data.

3. Field work will focus on site verification in cases where material remains can confirm or augment the documentary evidence pertinent to industrial properties. Determination of temporal and cultural affinities and authentication of documentary evidence by confirming a associations with individuals, groups, or activity loci, will be attempted.

4. Archeological investigations will attempt to locate undisturbed, closed context features and associated secondary refuse middens or lenses.

5. Documentation of other plantation period activities within the study area that were *not* discovered during the background review will be attempted.

6. Questions related to ethnic settlement patterns in Algiers also will be addressed. Irish and German immigrants were predominant (Fritz and Reeves 1983:38-39). Documentary evidence does not necessarily show the persistence of ethnic group identity, nor the ways in which ethnicity is generated, transmitted, and changed, nor the degree to which social boundaries between ethnic groups were maintained. Specific items or artifact classes recovered during the present study may contribute to these specific questions.

7. Recovery of cultural features and deposits dating to the Civil War period will contribute to research questions pertaining to the economic impact of the war on the community.

8. Recovery of artifact classes associated with industrialization will be attempted.

for recovery. A preliminary exploratory testing phase was designed to clarify contexts prior to intensive excavation.

Square 10, Lots 6 and 8 were selected for their perceived potential to yield information relating to the blacksmithing craft. Again, a preliminary exploratory phase utilizing backhoe trenches was intended to ascertain the location of former standing structures and refuse deposits.

Square 21, a late addition to the list of properties to be tested, was selected in order to provide information on the industrial Johnson Iron Works occupation. In addition, Square 21 also was thought to contain information from a Civil War era shipyard and a lumber mill. Exploratory trenching with the backhoe was requisite to this effort, because of the poor archival record for Square 21.

As shown in Table 2, the research objectives developed for the Algiers Point Data Recovery Project comprised a set of broad expectations derived from the archival record. Thus, the direct historical approach served as the paradigm directing both fieldwork and subsequent analyses. In fact, and as will be seen, many of these broadly defined objectives were fulfilled insofar as recovery of relevant data bases was concerned. Nevertheless, it is clear that the broad thematic content of the aforecited objectives was insufficiently explicit to program scientific treatment of the recovered data during analyses. For this reason, then, a programmatic reformulation of the research design was undertaken in order to permit abductive generation of testable hypotheses, based on previously assembled archival data and on a preliminary review of the data bases recovered. This aspect of the Algiers Point Data Recovery Program will be addressed subsequently in the section of this report entitled "Testing the Archeological Record."

CHAPTER V
FIELD INVESTIGATIONS

Introduction

Field investigations conducted during data recovery at Algiers Point were designed to provide documentary records of historic archeological components identified during archival research and targeted for recovery and analysis within the framework of the research design objectives already discussed. Wherever background documentation of a square or lot was unclear or incomplete due to gaps in the written archival record, test backhoe excavations were undertaken to ascertain the nature and extent of buried cultural deposits. Hand excavation units, typically 1 x 2 m in size, were utilized to recover features and refuse middens identified both archivally and during backhoe testing. Recovered cultural remains were recorded in field specimen logs; photographic documentation was provided and catalogued in a photographic log. Field methodologies applied at Algiers Point and synopses of all excavations undertaken and of their results are preserved below. Raw counts of the various data classes recovered from each excavation unit are presented in Appendix 1.

Methodology

The excavation methodology described below encompasses both the larger part of the Algiers Point Data Recovery effort undertaken by New Orleans District personnel and the excavation of Square 10, Lots 6 and 8, by personnel from R. Christopher Goodwin & Associates, Inc. Because two groups of archeologists worked on the Algiers Point project at different times, there necessarily were some inconsistencies in both field methodology and recordation technique. The methodologies applied by NOD archeologists and recounted below have been reconstructed from the field notes, record forms, and from communications with NOD personnel. Horizontal control for each square or lot investigated was provided through the establishment of a lot specific datum located at the southeast corner of each targeted square or lot. Using those control points, north and east grid baselines were surveyed and staked at each lot to guide the placement of trenches and hand excavation units. Where lots were adjacent, grid baselines were extended to encompass both lots. Known points of elevation for the Algiers Point project area previously had been established by U.S. Army Corps of Engineers, New Orleans District, land survey crews during preliminary surveys of the levee setback impact area. A permanent benchmark, or site datum, was located on the batture side of the existing levee in Square 21. Lot or unit elevations were extrapolated from the site datum when no fixed elevation markers were present in or near to the lots or squares to be investigated. Unit datums were established at trench or hand excavated units to control features or artifact proveniences. These points were verified using triangulation.

Backhoe trench excavations were used to provide stratigraphic control, and, as noted previously, to expose large, shallow areas where the nature and sequence of historic occupation was unknown or unclear. These trenches were tied to appropriate horizontal and vertical control points, and staked prior to mechanized excavation. Backhoe trenching was monitored closely by an archeologist. Whenever features were encountered during backhoe testing, work was stopped, the backhoe was moved, and the feature was cleaned by hand, photographed and recorded.

Whenever natural strata or lenses were readily discernible, excavation followed natural depositional sequences. Otherwise, ten or fifteen centimeter increments were used, depending on the nature of local deposition. Vertical control within hand excavated units was maintained using both surface-to-floor and datum-to-floor measurements. Wall profiles of all trenches and excavation units and plans of subsurface features were drawn to scale, and feature forms were executed to provide written documentary records.

Proveniences were recorded in a field specimen log using Square and/or Lot designations, unit labels, measurement data, and broad artifact class designations, e.g., artifacts, soil sample, brick sample, etc. Trenches were pre-numbered consecutively prior to the commencement of fieldwork. This system created several gaps in the provenience record. For example, in Square 21, trench two could not be excavated, due to the presence of a large concrete slab. Instead of changing trench numbers shown in the Algiers Point Data Recovery Plan, the preassigned trench number was deleted by a New Orleans District staff archeologist. This practice created some inconsistency in provenience designations.

Photographic documentation of fieldwork, using both color and black and white film, was undertaken. Photographs were taken of all trenches, hand units and features; site overview shots were taken, as well. The photo log recorded roll number, frame direction, camera, film type, and a description of each exposure. Soil and flotation samples were taken from all strata and levels excavated at Algiers Point that contained cultural refuse. Matrix samples also were collected from all features encountered in situ.

The Excavations

SQUARE 21

A total of eight backhoe trenches and three hand excavation units were completed in Square 21 (Figure 16). Each trench was twenty meters long and one meter wide. Trench depth varied from one to one and a half meters; each was excavated to 40 cm below contact with the sterile substratum. Hand excavation units measured 1 x 2 m, with the exception of E1 which was 4 x 4 m. Hand units were excavated to an average depth of 73 cm. A total of 15 features were recorded in Square 21; brick foundations of former standing structures were the predominant feature type. Trench

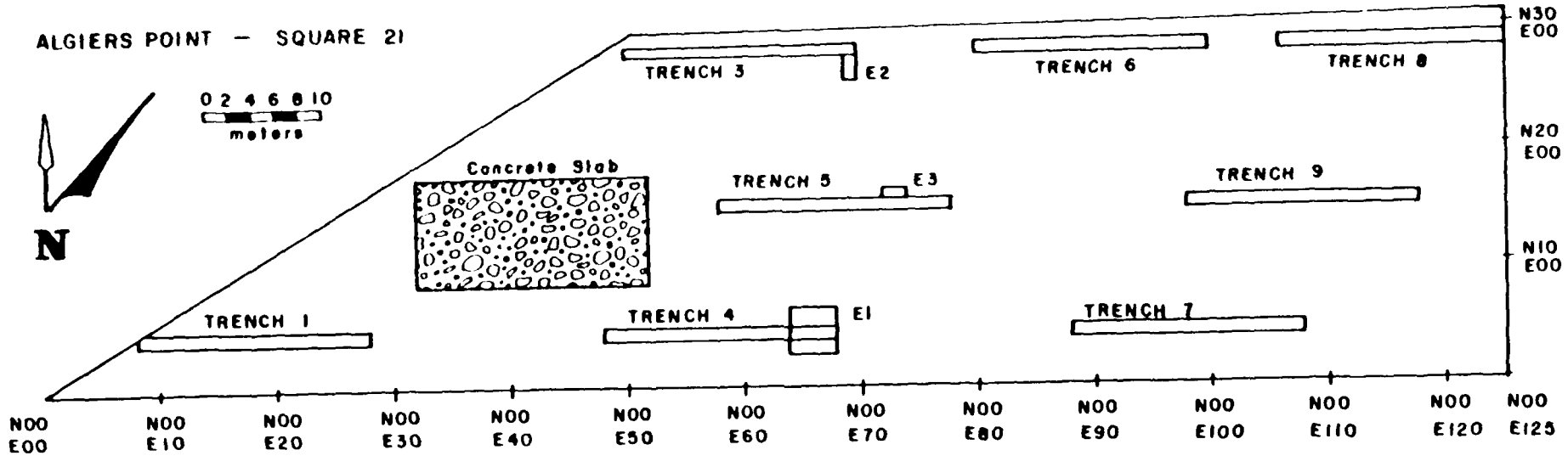


Figure 16. Plan of excavations, Square 21.

TABLE 4. Archeological Features Excavated in Square 21.

Feature Designation	Horizontal Provenience	Depth	Nature of Features	Condition	Probable Context
F1	T4; E1-SE quad	surface - 18 cm	rectangular brick pier	partially disturbed	primary-secondary
F2	T4; E1-SE quad	20-30 cm	rectangular brick pier	good	primary
F3	T4; E1-SE quad	43-63 cm	retangular brick pier	good	primary
F4	T4; E1-NE quad	26-59 cm	rectangular brick pier	good	primary
F5	T4; E1-NE quad	60-67 cm	rectangular brick pier	partially disturbed	primary-secondary
F6	T3; E2	16-50 cm	refuse deposit	disturbed	tertiary
F7	T4: E1-NW quad	34-71 cm	L-shaped brick pier	good	primary
F7A	T4; E1-NW quad	53-61 cm	brick pavement	partially disturbed	primary-secondary
F8	T4; E1-SQ quad	36-72 cm	rectangular brick pier	good	primary
F9	T5; E3	57-67 cm	wooden flooring	good	primary

TABLE 4. Continued.

Feature Designation	Horizontal Provenience	Depth	Nature of Features	Condition	Probable Context
F10	T5; E3	68-96 cm	L-shaped brick pier	good	primary
F11	E1 East Horizontal Extension	18-28 cm	brick spread footing	good	primary
F12	E1 East Horizontal Extension	26-36 cm	rectangular brick pier	partially disturbed	primary-secondary
F13	E1 East Horizontal Extension	33-44 cm	rectangular brick pier	partially disturbed	primary-secondary
F14	E1 North Horizontal Extension	18-67 cm	rectangular concrete foundation	good	primary
F15	E1 North Horizontal Extension	20-65 cm	rectangular concrete foundation	good	primary

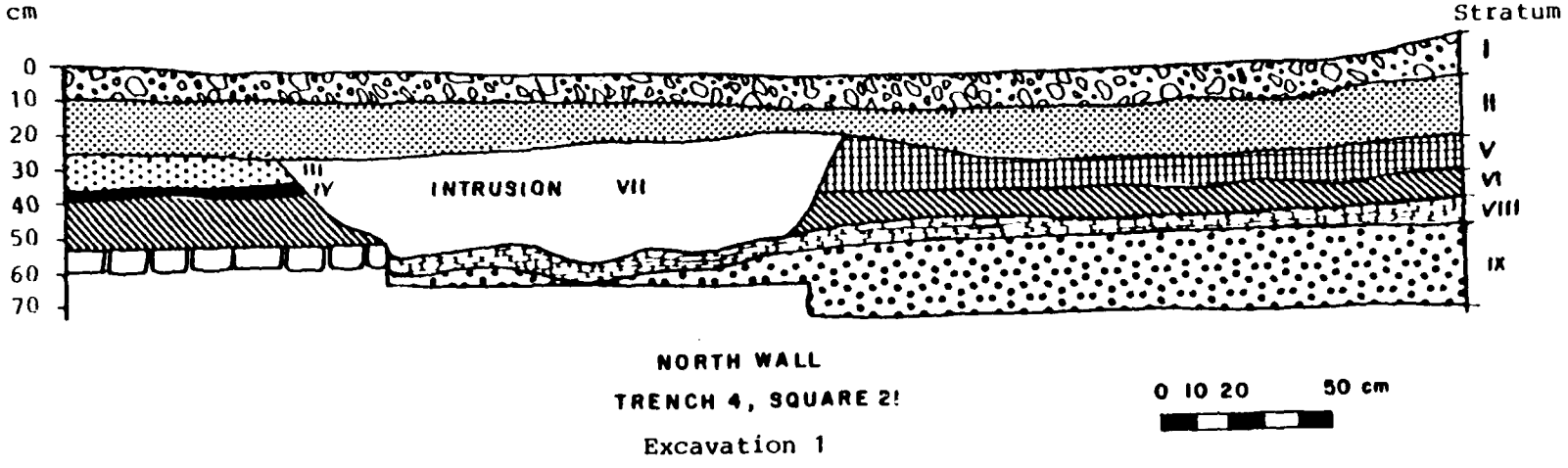


Figure 17. Stratigraphic profile of north wall of Trench 4, Square 21 (no legend available).

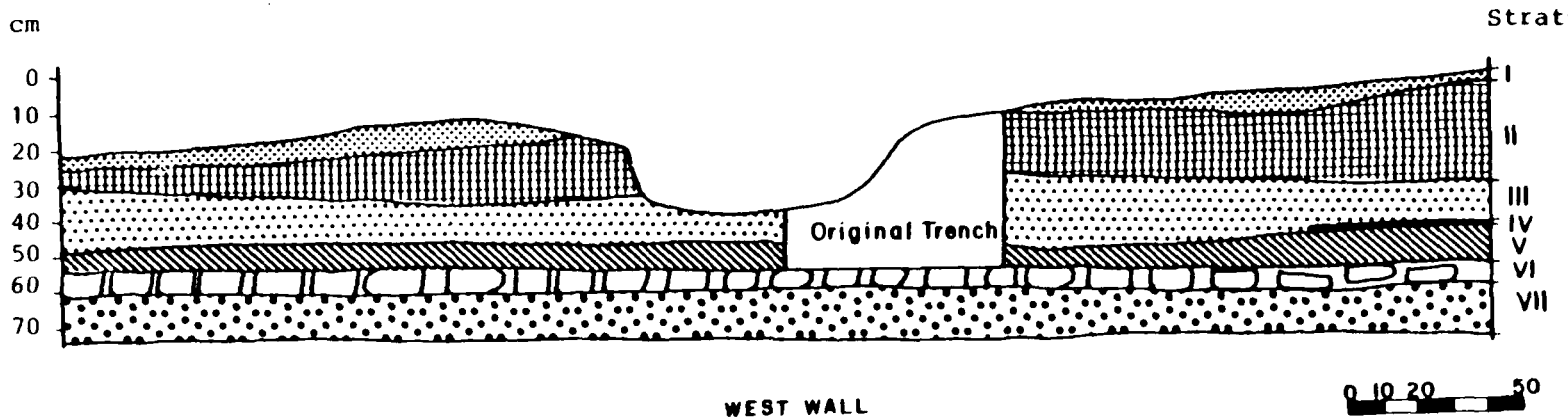


Figure 18. Stratigraphic profile of west wall of Trench 4, Square 21 (*no* legend available).

undertaken with the backhoe in order to define the horizontal extent of the former standing structure that had been partially exposed. In this manner, Features 11 - 15 were exposed. Features 11 - 13 were brick foundations deriving from a late 19th century residential occupation. Features 14 and 15 were concrete foundations associated with the Johnson Iron Works occupation of Square 21.

SQUARE 13

The "Church" Lot

The first phase of fieldwork at the "Church" lot was removal of a portion of the concrete surface of a parking lot that occupied Square 13. During monitoring of concrete removal, several portions of brick walls and of brick piers and foundations were exposed. Sections of the brick walls were cleaned and documented. After consultations with and site visits by archeologists from the Louisiana Division of Archeology, recovery emphasis at the "Church" lot shifted from hand unit excavation and artifact recovery to documentation of the Johnson Iron Works occupation. In addition, structural remains of several archivally known residential occupations were found.

A total of three trenches, each approximately ten meters long and one meter wide, were excavated in the "Church" lot (Figure 19). These trenches had an average depth of 1.6 meters. One additional 1 x 2 m hand excavation unit, E4, also was undertaken at the "Church" lot. Trench and hand excavation units in the "Church" lot are described in Table 5. All features (n=45) recovered are explicated in Table 6. Most of these features initially were located during a systematic probe test regime of the entire lot.

Forty-five brick features were recovered in the Church Lot. On the basis of previously conducted historic and archival research (Fritz and Reeves 1983:112-115), many of these features could be related to former standing structures. A series of features, all brick piers of varying types, located in the southwest portion of the Church Lot, appear to be associated with a residential structure built by Guillaud in 1883. Features 37, 38, 41-48 are associated with this structure (Figure 19; Table 6). Artifacts recovered from Feature 45 (Figure 20), an I-shaped double hearth, yielded a Mean Ceramic Date of 1888 (Table 29; see Chapter 7). Mean Ceramic Dates associated with several brick piers in this same area yielded dates slightly earlier than Feature 45.

Another structure, built earlier by Guillaud, functioned as a workshop for his furniture and mortuary businesses. This building was placed by Fritz and Reeves (1983) on the east side of the lot. A warehouse and office also occurred in this same area, but at a later date. Brick features associated with this complex of buildings are shown in Figure 19, and include Features 19-27, 29-32, 34-36, and 51-52. Both the 1896 and 1909 editions of the Sanborn Insurance Maps indicate the presence of former

TABLE 5. Synopsis of Trench and Hand Excavation Units in Square 13, The "Church" Lot.

Unit Designation	Horizontal Dimensions	Depth	No. of Strata/Levels	Features	Profiles	Floor Maps	Grid Coordinates
T10	1 x 10 m	1.75 m	4 strata	None	N Wall S Wall	None	N3-4, E1-11
T11	1 x 13 m	1.10 m	4 strata	None	E Wall	None	N13-26, E29-30
T12	1 x 12 m	2.00 m	4 strata	None	S Wall	None	N13-14, E15-27
E4	1 x 2 m	0.80 m	3 strata	None	N Wall	None	N28.20 - 30.20 E30-31

TABLE 6. Archeological Features Excavated in Square 13, The "Church" Lot.

Feature Designation	Depth	Nature of Features	Condition	Probable Context	Grid Coordinates
F 16	8-28 cm	wall base	good	primary	
F 17	0-20 cm	brick pier	good	unknown	N32-32.60, E6.20-6.80
F 18	0-20 cm	circular brick drill foundation	good	primary	N21.40-24, E10.40-12.90
F 19	8-32 cm	brick pier	good	primary	N24.40-24.60, E15.20-16
F 20	20-43 cm	brick pier	good	primary	N24.20-24.60, E17-17.80
F 21	13-34 cm	brick pier	good	primary	N23.60-24.60, E18-18.60
F 22	18-35 cm	brick pier	good	primary	N24.20-24.70, E18.90-19.60
F 23	0-120 cm	privy	good	primary (refuse is secondary)	N24.90-26.20, E17.80-18.30
F 24	16-35 cm	brick pier	good	primary	N26.30-27.20, E17.90-18.40
F 25	18-48 cm	brick pier	good	primary	N28-29, E17.90-18.40
F 26	22-49 cm	brick pier	good	primary	N30-30.60, E18-18.80
F 27	7-27 cm	L-shaped brick pier	partially disturbed	primary-secondary	N23.90-24.70, E21.40-22.30

TABLE 6. Continued.

Feature Designation	Depth	Nature of Features	Condition	Probable Context	
F 28	23-43 cm	brick pier	partially disturbed	primary-secondary	N24.40-25.20, E23.60-24.20
F 29	20-50 cm	brick pier	partially disturbed	primary-secondary	N21.04-22, E17.95-18.43
F 30	22-45 cm	brick pier	good	primary	N19-19.63, E18.07-18.52
F 31	0-34 cm	brick pier	good	primary	N18.80-19.80, E17.81-18.56
F 32	0-23 cm	brick pier	good	primary	N16.60-17.40, E19-19.38
F 33	0-94 cm	rectangular brick iron press foundation	good	primary	N17.78-20.20, E20-22
F 34	0-21 cm	brick pier	good	primary	N19.60-20.35, E22.20-22.43
F 35	0-21 cm	brick pier	good	primary	N18.20-19, E22.16-22.48
F 36	7-39 cm	brick pier	good	primary	N17.10-17.78, E22.13-22.45
F 37	36-56 cm	L-shaped brick pier	good	primary	N18.22-18.95, E12.48-13
F 38	34-59 cm	brick pier	good	primary	N16.60-17.20, E12.65-13

TABLE 6. Continued.

Feature Designation	Depth	Nature of Features	Condition	Probable Context	
F 39	20-118cm	rectangular brick iron punch foundation	good	primary	N14.74-16.60, E11.80-13.30
F 40	18-36 cm	brick pier	good	primary	
F 41	0-55 cm	brick pier	good	primary	N12.35-13.10, E12.70-13
F 42	28-53 cm	L-shaped brick pier	good	primary	N10-10.80, E12.55-13
F 43	30-55 cm	T-shaped brick pier	good	primary	N18.40-19, E8.90-9.50
F 44	45-63 cm	Brick pier	good	primary	N14.70-15.40, E9.20-9.55
F 45	40-56 cm	I-shaped double hearth	good	primary	N12.20-13.60, E8.20-9.80
F 46	45-63 cm	T-shaped brick pier	good	primary	N10-10.90, E8.60-9.35
F 47	14-37 cm	brick pier	good	primary	N18.70-19, E6.25-7.18
F 48	42-52 cm	brick pier	destroyed	tertiary	N18.80-19, E4.60-5
F 49	11-34 cm	L-shaped brick pier	good	primary	N18-18.80, E2.30-3

TABLE 6. Continued.

Feature Designation	Depth	Nature of Features	Condition	Probable Context	
F 50	0-83 cm	wall foundation	good	primary	
F 51	3-25 cm	brick pier	good	primary	N30.40-30.80, E20-21
F 52	6-36 cm	brick pier	good	primary	N30.40-38.80, E22.75-23.50
F 53	40-50 cm	brick pier	partially disturbed	primary-secondary	N8.20-8.94, E12.48-12.96
F 54	38-45 cm	brick pier	partially disturbed	primary-secondary	N5.40-6, E12.60-12.84
F 55	18-36 cm	brick pier	good	primary	N14.78-15.55, E2.16-2.60
F 56	40-66 cm	T-shaped brick pier	good	primary	N9.40-10.20, E2-2.85
F 57	48-60 cm	bottle cache	good	secondary	N4.30-5, E12.90-13.35
F 58	22-25 cm	metal pipe	good	primary	N3.50-4.96, E12.45-13.50
F 59	0-12 cm	ceramic sherd concentration in T12	disturbed	secondary-tertiary	
F 60	5-62 cm	brick corner foundation	good	primary	N30-30.60, E27.70-28.65

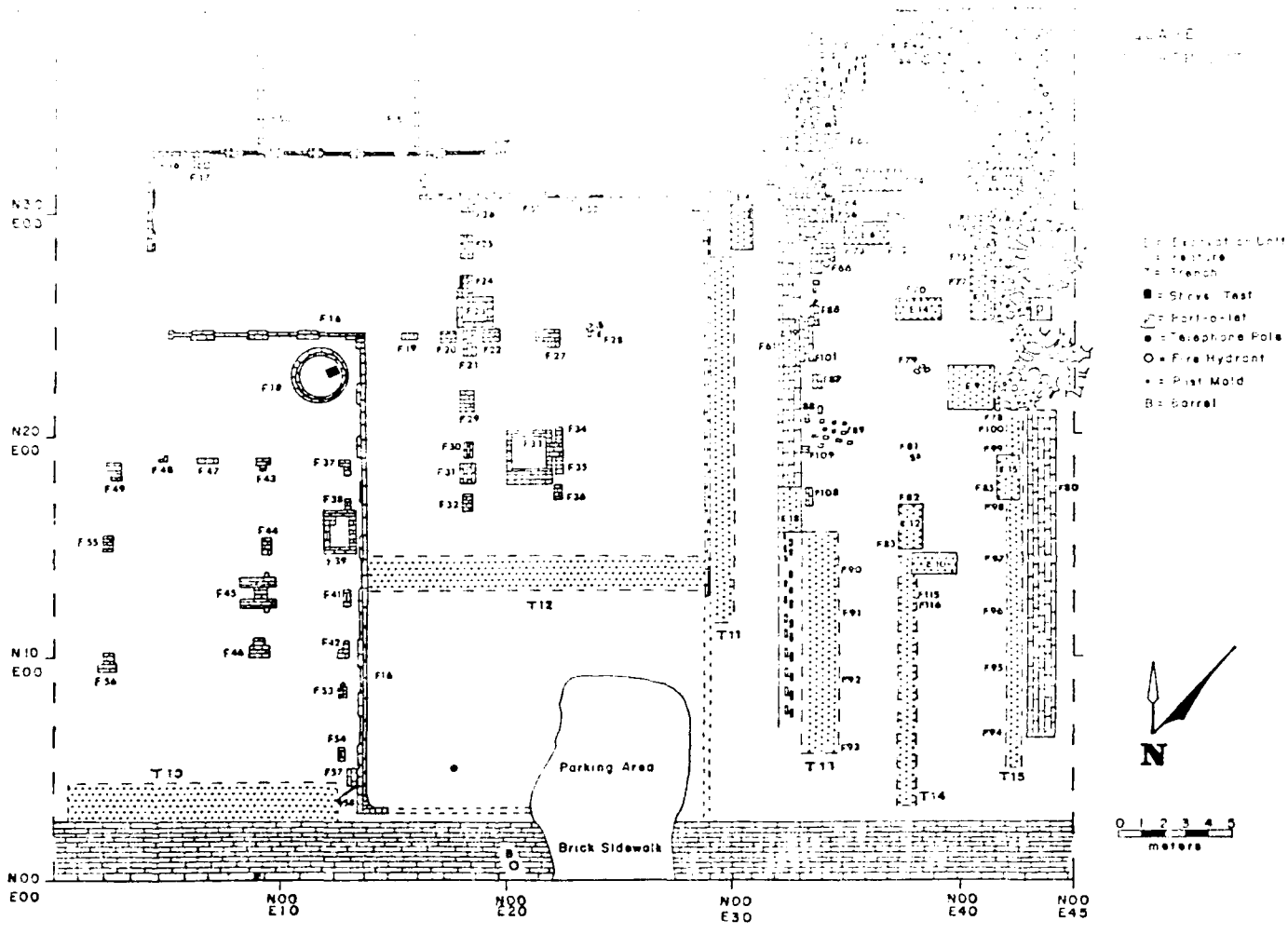


Figure 19. Excavation plan and archeological features in the Church Lot, Algiers Point.

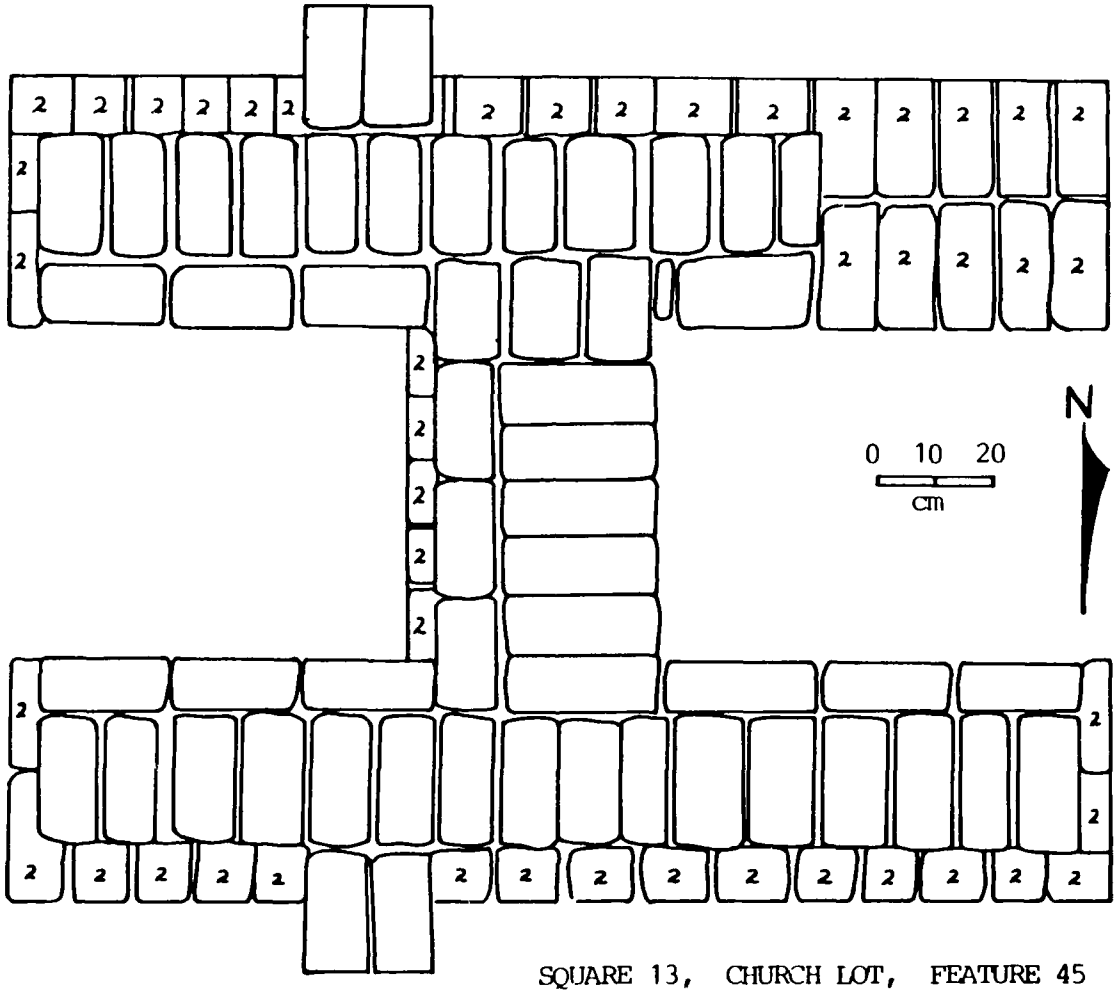


Figure 20. Plan view of Feature 45, I-shaped double hearth.

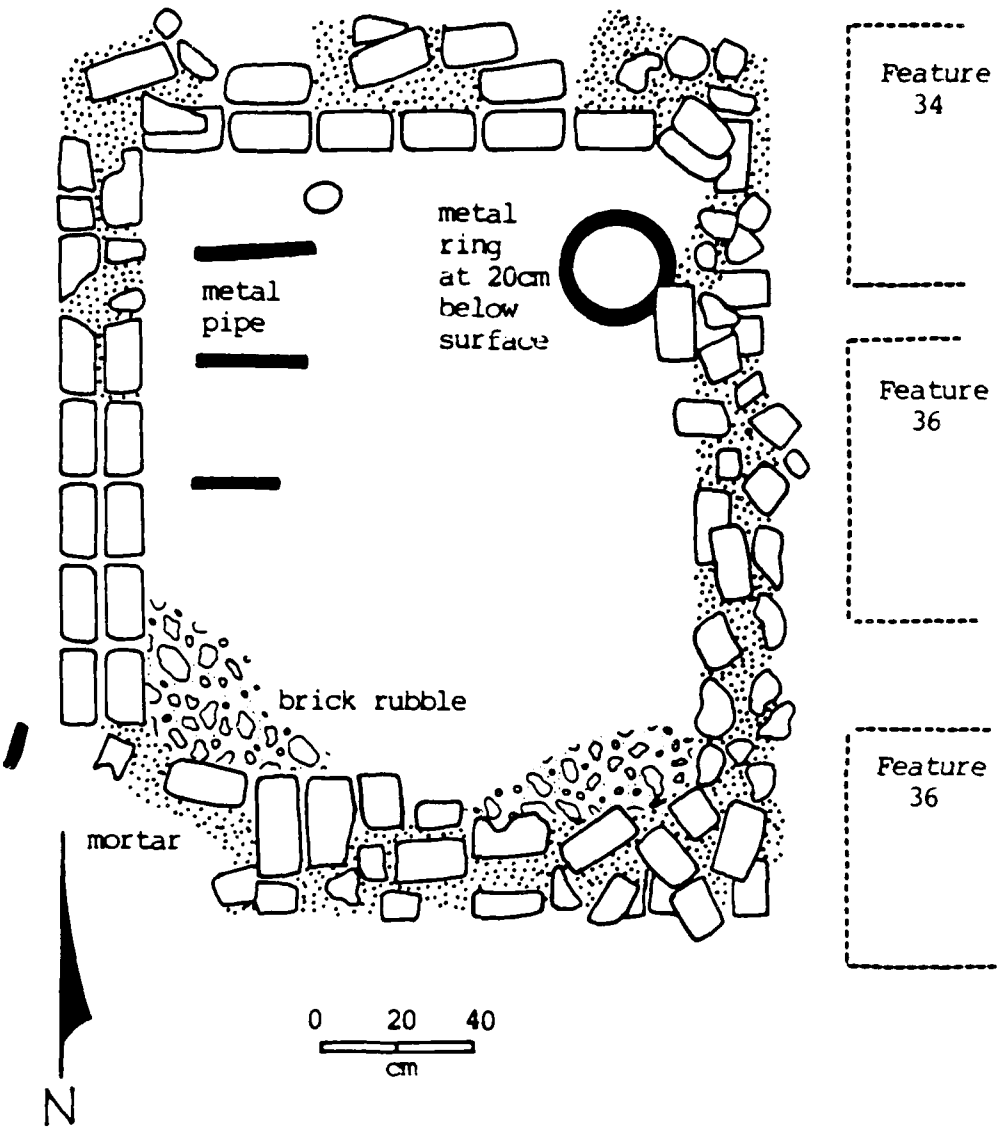
standing structures in this location. However, previous historical and archival research (Fritz and Reeves 1983), together with the ambiguous set of mean ceramic dates associated with these features (Table 29; see Chapter 7), preclude the assignation of individual brick footings to specific former structures.

Several large brick features were identified as machinery bases by a local informant, Mr. James Comfort. Feature 33 (Figures 21 and 22), Feature 39 (Figure 23), and Feature 23 (Figures 24 and 25) were used for supporting sheet iron punches. Construction was similar in all three features; interiors initially were filled with silty clay and later covered by a layer of cinders. A framework of angel iron was placed on top of the cinders, and concrete was poured to form a solid base for the punch to rest on. The sequence of structural modifications recorded for these features suggest the reuse of existing foundations, probably by Johnson Iron Works. The final Johnson Iron Works occupation of the Church Lot also is represented by Features 16 and 50, brick walls having spread footings spaced at regular intervals.

Lot 13

During the removal of the parking lot by the Orleans Parish Levee Board in the Lot 13 area of Square 13, a number of brick piers and foundation features were uncovered. For this reason, mechanized clearing was halted and the concrete overburden was removed by hand. Because of the well-documented historic occupation of Lot 13, sixteen hand excavations were undertaken in order to recover structural remains, refuse deposits, residential activity loci, and privies. These units, labelled E5 - E20 (Figure 19), were excavated to an average depth of 60 cm. After hand excavation at these sixteen venues was completed, three backhoe trenches (T13 - 15), with an average length of 9.6 meters, were excavated to expose structural remains deriving from the Robelet occupation. The backhoe was utilized subsequently to remove overburden; in this manner, it was hoped that the remains of a two room detached kitchen from the Robelet occupation would be exposed. A total of 57 features, designated F61 - F118, were recovered from Lot 13. These features are summarized in Table 7. All excavation units in Lot 13 are described in Table 8.

Based on previous archival research by Fritz and Reeves (1983), it was anticipated that there had been continuous occupation of Lot 13 beginning with the Robelet creole cottage (ca. 1839 - 1865). The 1896 Sanborn map illustrated a shotgun style residence, rather than a creole cottage, which led Reeves (personal communication with David McCullough of the New Orleans District, U.S. Army Corps of Engineers, July, 1983) to suggest that the cottage had been modified to change its configuration. However, New Orleans District archeologists noticed stratigraphic separation between refuse deposits in Units 11 and 16 indicative of an intervening period between the creole cottage and the shotgun residence (Figures 26 and 27).



FEATURE 33

SQUARE 13, CHURCH LOT

Figure 21. Plan view of Feature 33, a brick iron press foundation.

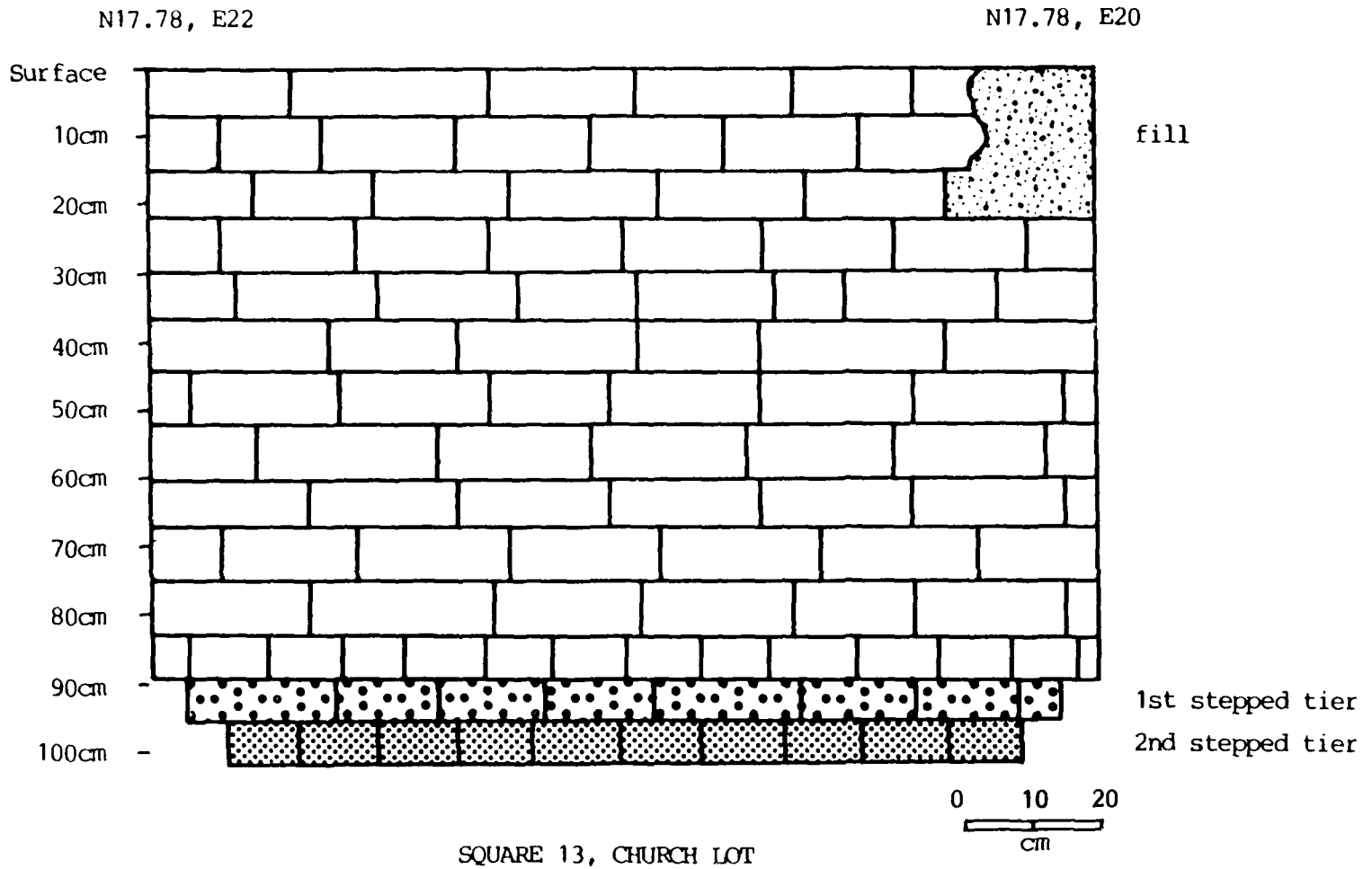


Figure 22. Profile view of Feature 33, a brick iron press foundation.

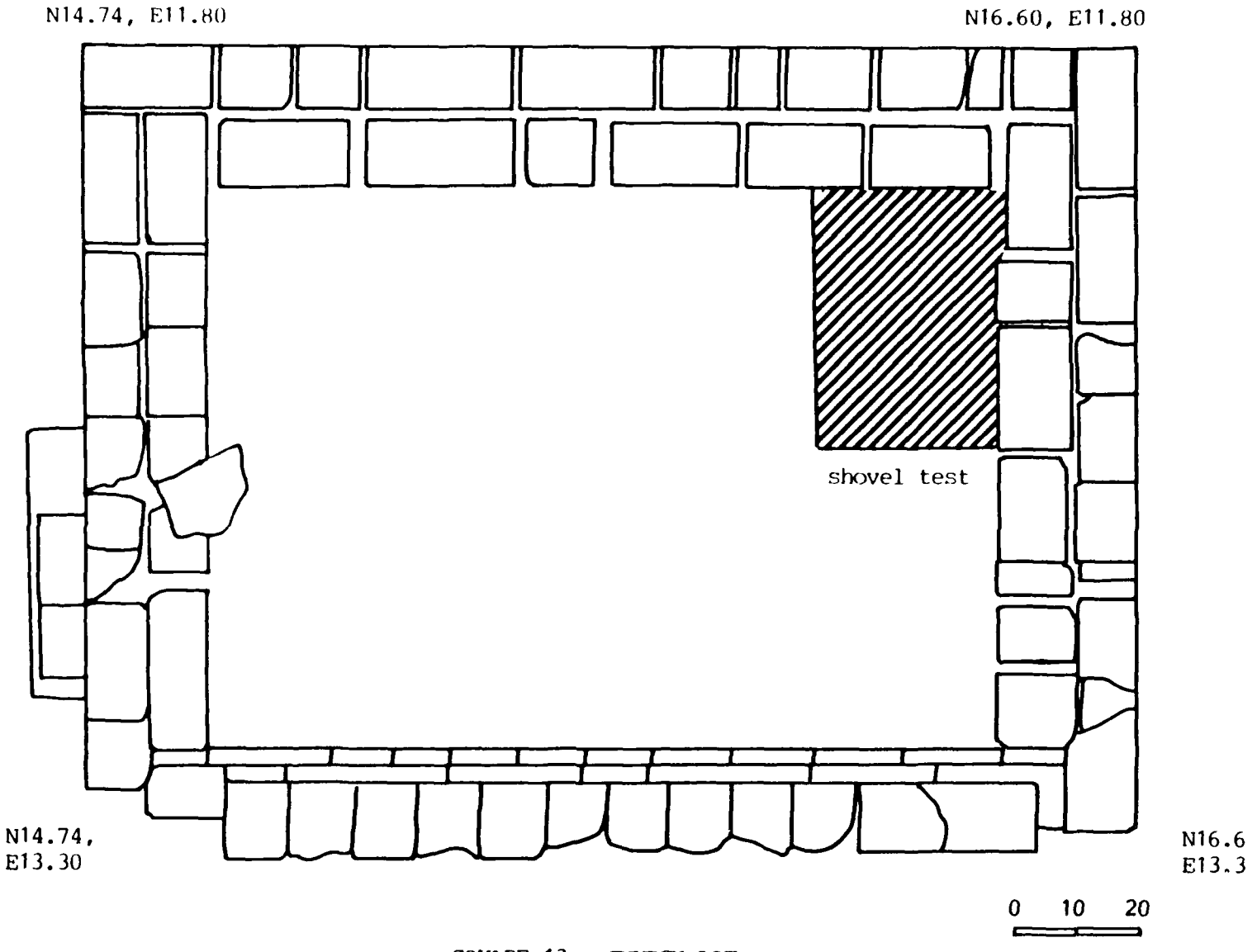
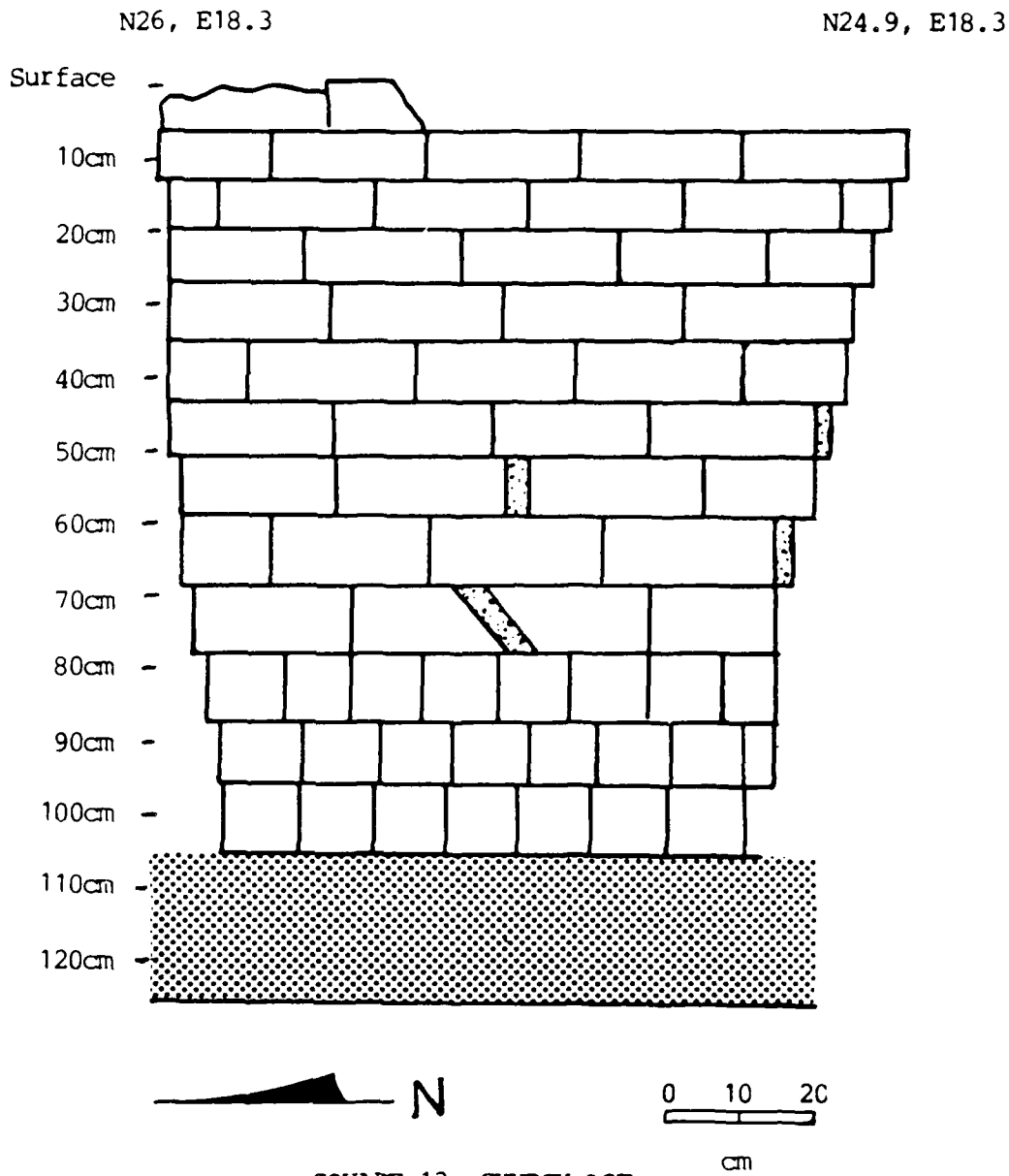


Figure 23. Plan view of Feature 39, a brick iron punch foundation.



SQUARE 13, CHURCH LOT
Feature 23, East Wall

Figure 24. Profile view of Feature 23, a brick-lined privy.

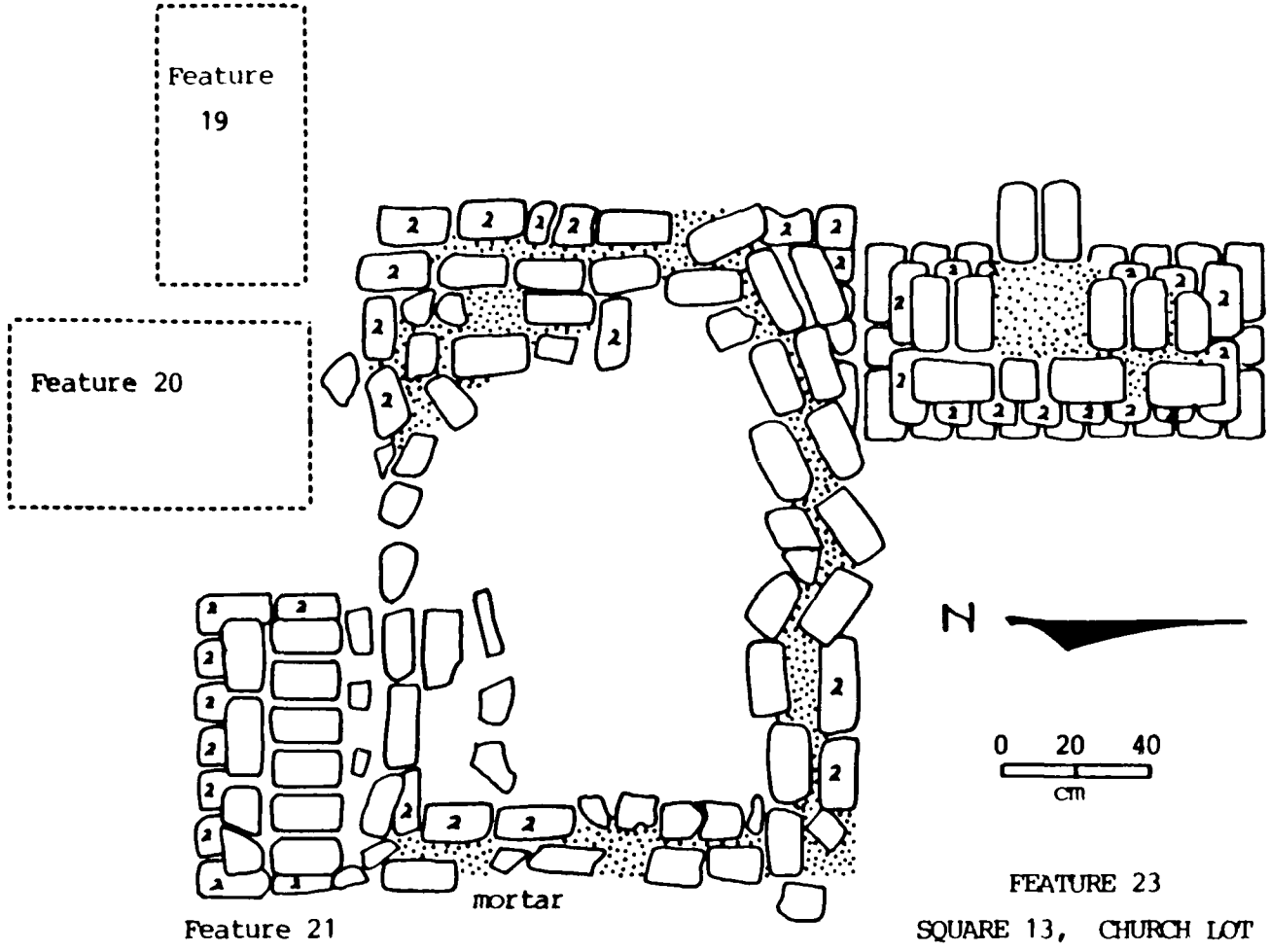


Figure 25. Plan view of Feature 23, a brick-lined privy.

TABLE 7. Archeological Features Excavated in Square 13, Lot 13.

Feature Designation	Depth	Nature of Features	Condition	Probable Context	Grid Coordinates
F 61	0-30 cm	brick sidewalk	partially disturbed	primary-secondary	N7-31, E32-33
F 62	14-20 cm	brick pavement	good	primary	N31.20-36, E31.40-34
F 63	8-14 cm	brick pavement	destroyed	lost	N31.80-37, E34-36.70
F 64	0-12 cm	brick pier	partially disturbed	primary-secondary	N29.50-30.60, E34-34.50
F 65	0-26 cm	brick cistern foundation	good	primary	N28.60-31.20, E33-34
F 66	6-35 cm	L-shaped brick pier	partially disturbed	primary-secondary	N27.20-28.47, E33.30-34.55
F 67	7-17 cm	brick cistern foundation	partially disturbed	primary-secondary	N29.40-30.10, E41.14-42.08
F 68	surface	brick pier (?)	destroyed	lost	N34.60-34.76, E32.34-32.71
F 69	0-80 cm	brick lined privy	partially disturbed	primary-secondary	N37.60-38.80, E35.40-38.20
F 70	30-37 cm	brick pier	good	primary	N25.55-26, E37.80-38.20

TABLE 7. Continued.

Feature Designation	Depth	Nature of Features	Condition	Probable Context	
F 71	33-45 cm	brick pavement	partially disturbed	primary-secondary	N28.60-29.40, E35-36.80
F 72	20-27 cm	brick pier	partially disturbed	primary-secondary	N28.50-28.75, E35.75-36.35
F 73	30-37 cm	brick pier	partially disturbed	primary-secondary	N28.50-28.64, E35.34-35.53
F 74	15-38 cm	brick pier	good	primary	N30.90-31.11, E36.84-37.17
F 75	33-41 cm	brick cistern foundation	good	primary	N27.20-28.08, E41-41.40
F 76	0-23 cm	brick pier	good	primary	N28.20-29, E41.25-41.40
F 77	33-39 cm	brick pier	partially disturbed	primary-secondary	N25.60-26, E41.40-41.51
F 78	16-41 cm	L-shaped brick pier	good	primary	N21-21.55, E41.40-41.75
F 79	0-5 cm	brick feature (?)	destroyed	tertiary	N22.60-23, E38-38.63
F 82	13-33 cm	brick pier	good	primary	N16.63-16.80, E37.52-37.95
F 83	13-50 cm	brick pavement	partially distured	primary-secondary	N14.80-15.15, E37.49-38.20

TABLE 7. Continued.

Feature Designation	Depth	Nature of Features	Condition	Probable Context	
F 84	.8-1.4cm	wood-lined privy	disturbed	primary-secondary	N37-38, E37-38
F 85	42-53 cm	intrusive fill	disturbed	tertiary	N32.80, E42.48-42.60
F 86	0-19 cm	brick pier	good	primary	N24.80-25.60, E33.45-33.77
F 87	0-23 cm	brick pier	good	primary	N22-22.60, E33.49-33.92
F 88	0-21 cm	L-shaped brick foundation	partially disturbed	primary-secondary	N20.60-21.18, E33.07-33.96
F 89	0-8 cm	brick feature (?)	destroyed	tertiary	N19.57-20.55, E33.32-35
F 90	2-17 cm	brick pier	good	primary	N13.60-14, E33.26-33.54
F 91	1-20 cm	brick pier	good	primary	N11.23-12, E33.26-33.54
F 92	4-12 cm	brick pier	partially disturbed	primary-secondary	N8.38-9, E33.31-33.52
F 93	3-9 cm	brick pier	partially disturbed	primary-secondary	N6-6.40, E34-34.72
F 94	0-17 cm	brick pier	good	primary	N6.44-7, E42.12-43
F 95	0-21 cm	brick pier	good	primary	N9.16-9.80, E42.78-43
F 96	2-18 cm	brick pier	good	primary	N11.45-12.17, E42.78-43

TABLE 7. Continued

Feature Designation	Depth	Nature of Features	Condition	Probable Context	
F 97	0-21 cm	brick pier	good	primary	N14-14.56, E42.60-43
F 98	0-16 cm	brick pier	good	primary	N16.76-17.40, E42.70-43
F 99	0-15 cm	brick pier	good	primary	N19-19.40, E42.75-43
F 100	0-17 cm	brick pier	good	primary	N20.60-21, E42.15-43
F 101	16-25 cm	brick pavement	partially disturbed	primary-secondary	N23.10-25.20, E33-33.46
F 102	16-26 cm	intrusive fill	disturbed	tertiary	
F 103	16-34 cm	intrusive fill	disturbed	tertiary	
F 104	10-17 cm	ceramic pipe	good	primary	N29.20-29.35, E41.34-42.08
F 105	9-27 cm	wooden post	good	primary	N29.37-29.41, E41.50-41.56
F 106	37-41 cm	metal pipe	good	primary	
F 107	19-30 cm	brick pavement	good	primary	N27-31, E32.71-33.60
F 108	0-22 cm	brick pier	good	primary	N16.70-17.60, E33.25-33.60
F 109	0-12 cm	brick pier	partially disturbed	primary-secondary	N19.10-19.40, E33-33.35

TABLE 7. Continued.

Feature Designation	Depth	Nature of Features	Condition	Probable Context	
F 110	59-66 cm	brick pier	partially disturbed	primary-secondary	
F 111	30-44 cm	brick feature (?)	destroyed	tertiary	
F 112	38-49 cm	brick pier	partially disturbed	primary-secondary	
F 113	33-40 cm	brick pier	partially disturbed	primary-secondary	
F 114	36-44 cm	brick pier	partially disturbed	primary secondary	
F 115	4-19 cm	brick pier	good	primary	
F 116	2-20 cm	I-shaped, double hearth foundation	partially disturbed	primary-secondary	
F 117	32-40 cm	wooden floor remnant	partially disturbed	primary	N26.50-27.20, E33.30-34.24
F 118	55-61 cm	brick pier	partially disturbed	primary-secondary	N24.20-24.38, E36.16-36.25

TABLE 8. Synopsis of Trench and Hand Excavation Units in Square 13, Lot 11.

Unit Designation	Horizontal Dimensions	Depth	No. of Strata/Levels	Features	Profiles	Floor Maps	Grid Coordinates
T13	1.5 x 6 m	0.90 m	5 strata	F 110-114	E wall W wall	None	N7-31, E32-33
T14	1 x 9 m	1.50 m	4 strata	None	E wall	Stratum II	N4-13, E37-38
T15	1 x 14 m	1.00 m	4 strata	None	E wall	None	N5-19, E42-43
E5	1 x 2 m	0.50 m	5 levels	None	E wall	None	N32.60-34.60, E32.80-33.80
E6	1 x 2 m	0.70 m	7 levels	F 71-73; F 85	S wall E wall	Level 7	N28.40-29.40, E34.80-36.80
E7	1 x 2 m	0.80 m	3 strata	F 69	E wall	Stratum I	N37.80-38.80, E35.60-37.60
E8	1 x 2 m	1.40 m	1 stratum (disturbed privy fill)	F 84	None	None	N37-38, E37-38
E9	2 x 2 m	0.52 m	5 levels	F 78	S wall	Level 2	N21-23, E39.40-41.40
E10	1 x 2 m	0.30 m	3 levels	None	N wall S wall	None	N13.60-14.60, E37.80-39.80
E11	1 x 2 m	0.60 m	4 strata	F 77	S wall	Stratum 3	N25-27, E40.40-41.40
E12	1 x 2 m	0.53 m	4 strata	F 82-83	E wall W wall	None	N14.80-16.80, E37.20-38.20

TABLE 8. Continued.

Unit Designation	Horizontal Dimensions	Depth	No. of Strata/Levels	Features	Profiles	Floor Maps	
E13	1 x 2 m	0.50 m	5 levels	F 74 F 106	N wall W wall	Level 2	N20.80-21.80, E35.40-37.40
E14	1 x 2 m	0.80 m	5 strata	F 70	W wall	Stratum 3	N25-26, E37-39
E15	1 x 2 m	0.75 m	6 levels	None	E wall	None	N17-19, E41.60-42.60
E16	1 x 2 m	0.54 m	4 strata	F 75-76	E wall W wall	Stratum 4	N27.20-29.20, E40.40-41.40
E17	1 x 2 m	0.55 m	5 strata	None	N wall S wall	None	N31.80-32.80, E40.60-42.60
E18	1 x 2 m	0.33 m	4 strata	None	W wall	Stratum 4	N15.60-17.60, E32-33
E19	1 x 2 m	0.35 m	1 stratum	F 108	W wall	None	N23-25, E32-33
E20	1 x 2 m	0.30 m	5 strata	F 61-62, 64, 107	W wall	Stratum 5	N30-31-, E32-34

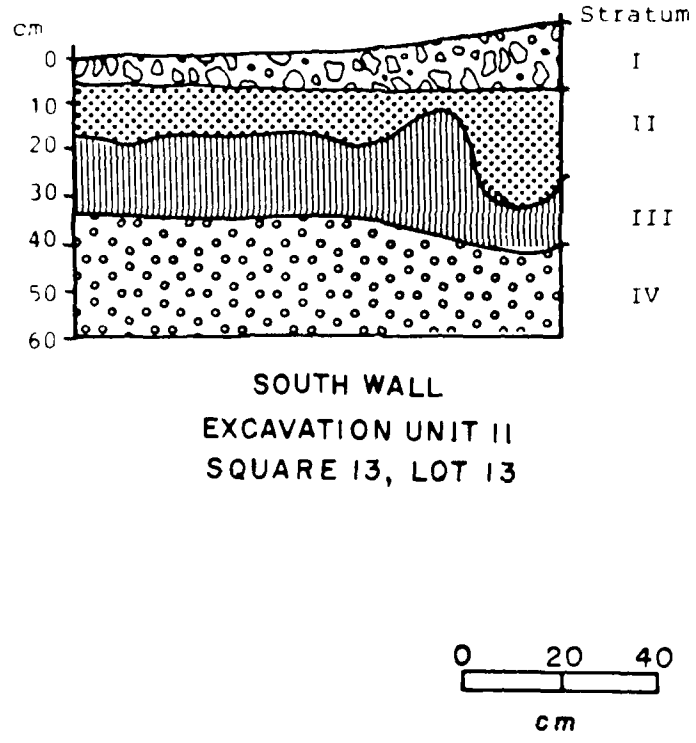
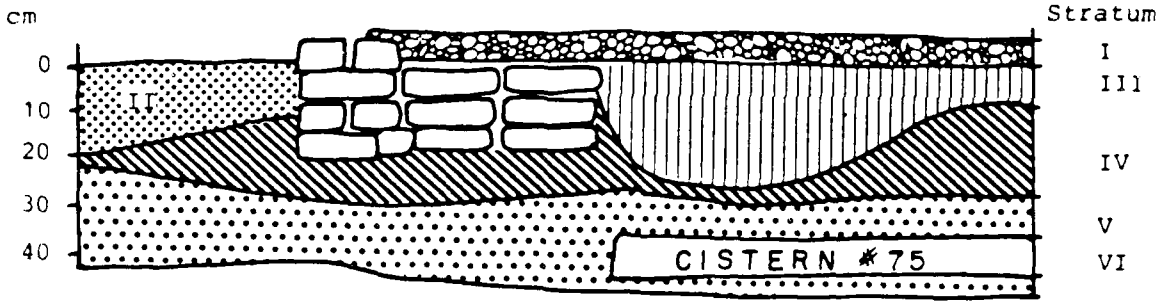
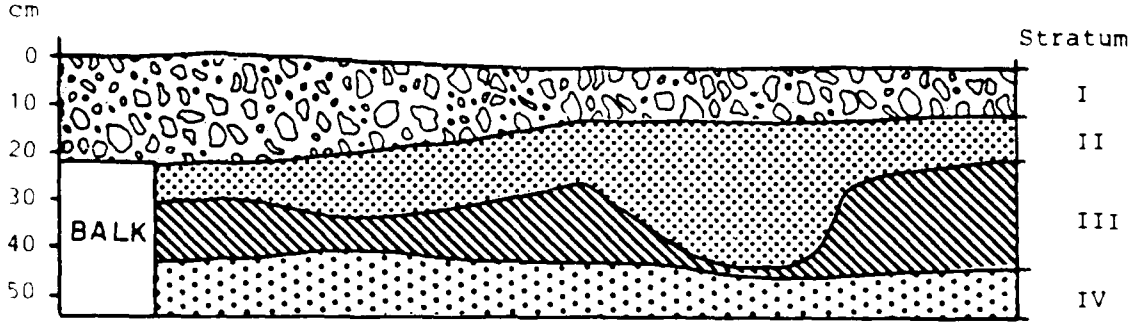


Figure 26. Stratigraphic profile of Unit 11, Square 13, Lot 13.



EAST WALL

SQUARE 13, LOT 13



WEST WALL

SQUARE 13, LOT 13

EXCAVATION UNIT 16

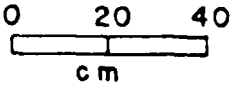


Figure 27. Stratigraphic profiles of east and west walls of Unit 16, Square 13, Lot 13.

Subsequent laboratory analysis was designed to investigate the possibility that two distinguishable components were present on the lot. As will be seen, chronological experiments indicated a greater likelihood that two components were present, corroborating the stratigraphic observation of NOD personnel.

Lots 1 and 2

Field investigations in Lots 1 and 2 were designed to recover structural remains and refuse derived from the Wharton Tavern complex. A total of ten backhoe trenches were excavated in Lots 1 and 2, exposing eight structural features (Figure 28). However, all of these features derived from later industrial occupations of these lots (Southern Marine Works and Johnson Iron Works), leading to the probative hypothesis that industrial development had destroyed most if not all earlier structural remains. Excavation in Lots 1 and 2 are described in Table 9; Features from these units are synopsized in Table 10. Completion of excavation in Lots 1 and 2 of Square 13 signalled termination of fieldwork by New Orleans District personnel.

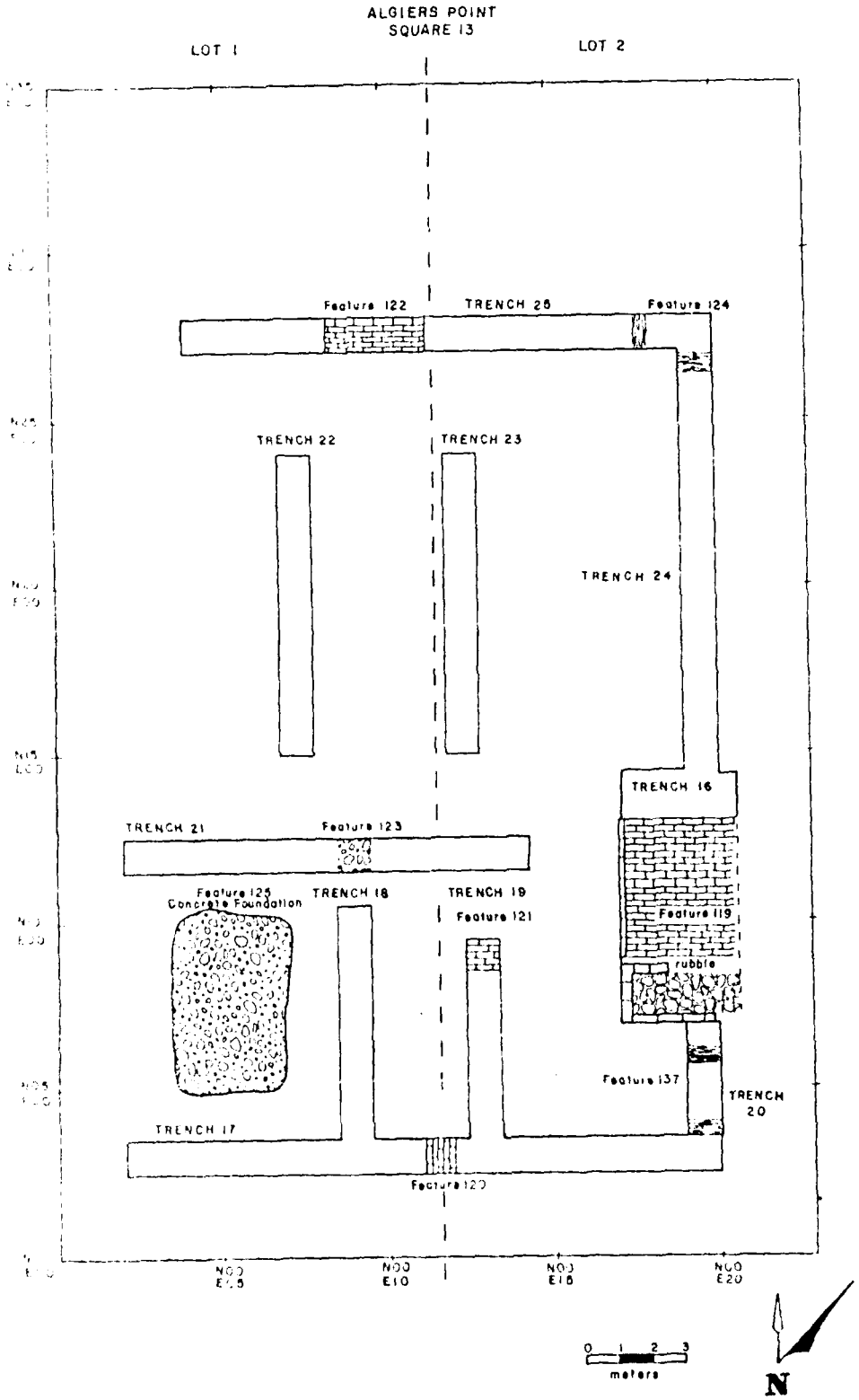
SQUARE 10

Lot 8

After a hiatus of about three months, excavations in Square 10, Lots 6 and 8 were begun by archeologists from R. Christopher Goodwin & Associates, Inc., under Contract No. DACW29-84-D-0029, work order LMNPD-84-31. Field investigations in Lot 8 were designed to recover subsurface structural features and to sample secondary refuse associated with the documented occupation of Francois Duvic, an immigrant master blacksmith. Within Lot 8, three backhoe trenches, designated T26 - 28, were excavated in an attempt to discern the nature and extent of structural remains. Trench excavation revealed a single feature, designated F128, in Trench 27. This feature was a rectangular brick pier. Three additional hand excavation units, E21 - 23, completed the complement of subsurface tests in Lot 8. One additional feature (F135), a brick pavement, was revealed in E23. The trench and hand excavation units in Lot 8 are described below.

Three backhoe trenches were excavated in Lot 8; these were placed N-S (grid) along the E5.5 grid line (Figure 29). Each trench measured 5 meters in length and approximately one meter in width. A distance of 5 meters separated the trenches. Coordinates for each trench are given in Table 11.

Five strata were identified in the east wall profile of Trench 26 (Figure 30). Below a thin (5-7 cm) overburden, a lens of ash and cinder (Stratum II), mort- (Stratum III), and a heterogeneous fill consisting of brick fragments, ash, cinder, metal, small gravel, glass, ceramics, coal, oyster shell, and slate (Stratum IV) were found. A portion of Stratum IV was mapped in plan view during the excavation of T26, and is shown in Figure 31. The fill of Stratum IV rested on top of sterile clay



Excavation plan of Square 13, Lots 1 and 2.

TABLE 9. Synopsis of Trench Excavation Units in Square 13, Lots 1 & 2.

Unit Designation	Horizontal Dimensions	Depth	No. of Strata/Levels	Features	Profiles	Floor Maps	Grid Coordinates
T16	1 x 6 m	0.80 m	4 strata	F 119	N wall	None	
T17	1 x 17 m	0.85 m	4 strata	F 120	N wall	None	N2.5-3.5, E2-19
T18	1 x 7.5 m	0.85 m	4 strata	None	W wall	None	N3.5-10.5, E6.4-7.4
T19	1 x 6 m	0.85 m	4 strata	F 121	W wall	None	N3.5-9.5, E10.4-11.4
T20	1 x 3.5 m	0.85 m	3 strata	F 119 F 137	W wall	None	N3.5-7, E18-19
T21	1 x 14.5m	0.83 m	4 strata	F 123	S wall	None	N11.5-12.5, E2-16.5
T22	1 x 9.5 m	0.85 m	5 strata	None	W wall	None	N15-24, E6.75-7.75
T23	1 x 8 m	0.85 m	3 strata	None	W wall	None	N15-24, E11.75-12.75
T24	1 x 13 m	0.85 m	6 strata	F 124	W wall	None	N15-28, E18.95-19.95
T25	1 x 16 m	0.85 m	8 strata	F 122 F 124	N wall	None	27-28, E3.95-19.95

TABLE 10. Archeological Features Excavated in Square 13, Lots 1 & 2.

Feature Designation	Depth	Nature of Features	Condition	Probable Context	Grid Coordinates
F 119	0-78 cm	large brick machinery foundation	good	primary	N7-13, E16.95-20.55
F 120	9-61 cm	brick pier (function unknown)	good	primary	N2.5-3.5, E11.05-11.85
F 121	45-80 cm	brick and concrete	good	primary	N8.60-9.50, E10.40-11.40
F 122	5-60 cm	brick and concrete	good	primary	N27-28, E8.25-10.25
F 123	3-50 cm	brick and concrete	good	primary	N11.50-12.50, E6.40-7.40
F 124	8-47 cm	creosoted wood beams	good	primary	N26.30-28, E17.55-20.05
F 125	5-76 cm	large concrete machinery foundation	good	primary	N4.90-10.50, E2.35, 7.15
F 137 (assigned in lab after completion of fieldwork)	17-45 cm	creosoted wood beams	good	primary	N3.50-6.30, E18-19

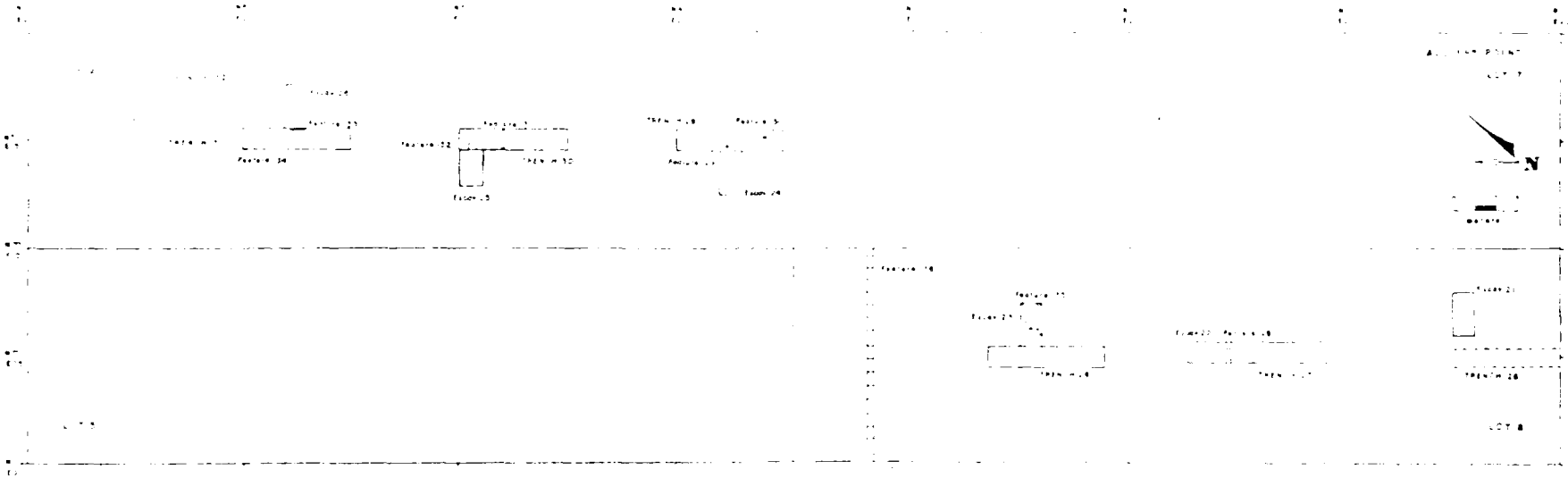
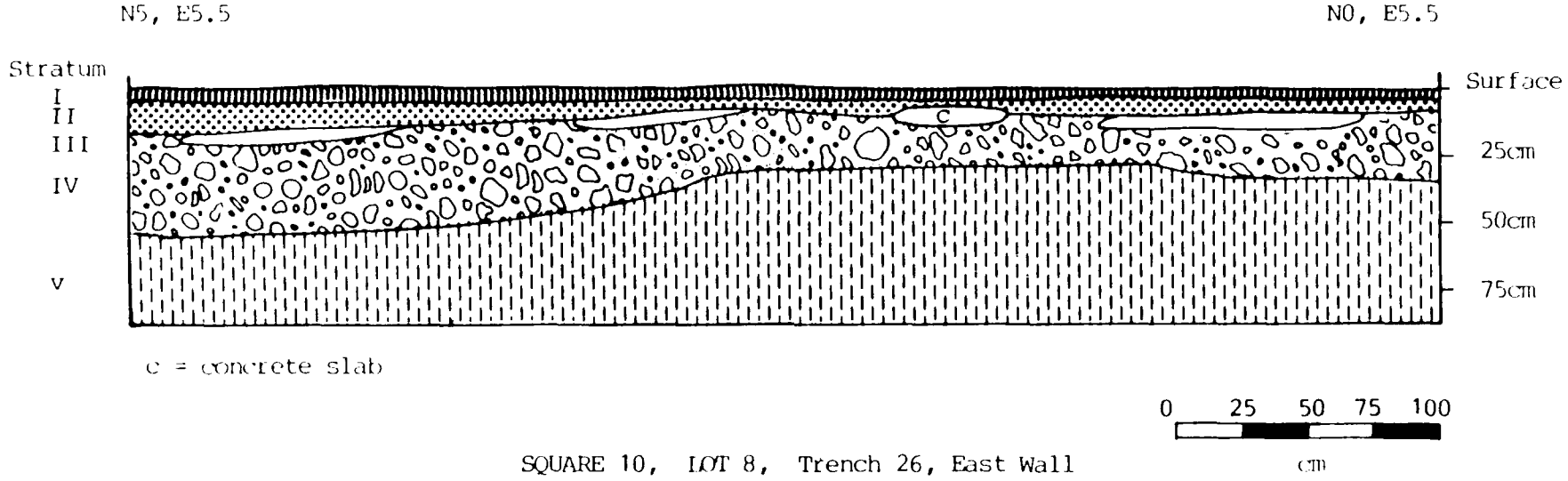


TABLE 11. Synopsis of Trench and Hand Excavation Units in Square 10, Lot 6 & 8.

Unit Designation	Horizontal Dimensions	Depth	No. of Strata/Levels	Features	Profiles	Floor Maps	Grid Coordinates
T26	1 x 5 m	0.87 m	5 strata	None	E wall W wall	None	N0-5, E4.6-5.4
T27	1 x 5 m	0.85 m	7 strata	F 128	W wall N wall	Strata 2, 4	N10-15, E4.5-5.5
T28	1 x 6 m	0.83 m	6 strata	None	E wall	None	N20-25, E4.5-5.5
T29	1 x 5 m	0.67 m	6 strata	F 129 F 130	S wall E wall	@ 52 cm	N36-41, E14.5-15.5
T30	1 x 5 m	0.76 m	3 strata	F 131 F 132	W wall	@ 54 cm	N46-51, E14.5-15.5
T31	1 x 5 m	0.75 m	4 strata	F 133 F 134	E wall W wall	Stratum 3	N56-61, E14.5-15.5
T32	1 x 5 m	1.45 m	7 strata	None	N wall	None	N65-66, E15-20
E21	1 x 2 m	0.65 m	5 levels	None	N wall	Level 2	N4-5, E6-8
E22	1 x 2 m	0.75 m	5 levels	F 128	S wall W wall	Levels 2,4	N15-17, E4.5-5.5
E23	1 x 2 m	0.65 m	3 levels	F 135	N wall E wall	Level 4	N24-25, E5.5-7.5
E24	1 x 2 m	0.70 m	3 strata	None	W wall	Strata 3	N38-39, E12.5-14.5

TABLE 11. Continued.

Unit Designation	Horizontal Dimensions	Depth	No. of Strata/Levels	Features	Profiles	Floor Maps	
E25	1 x 2 m	0.80 m	3 strata	F 132A	N wall	Strata 2,3	N50-51, E12.5-14.5
E26	1 x 2 m	0.92 m	2 strata	F 133	S wall	Strata 1,2	N58.20-59.20, E15.5-17.5



SQUARE 10, LOT 8, Trench 26, East Wall

Figure 30. Stratigraphic profile of Trench 26, east wall, Square 10, Lot 8, Algiers Point Data Recovery Project.

Figure 30. Continued.

KEY

Stratum I:	Silty loam overburden with rangia shells, iron fragments, charcoal, brick fragments
Stratum II:	Ash and cinder
Stratum III:	Mortar
Stratum IV:	Silty loam with ash, cinder, scrap metal, gravel, glass, ceramics, coal, oyster shell, slate
Stratum V:	Silty clay loam

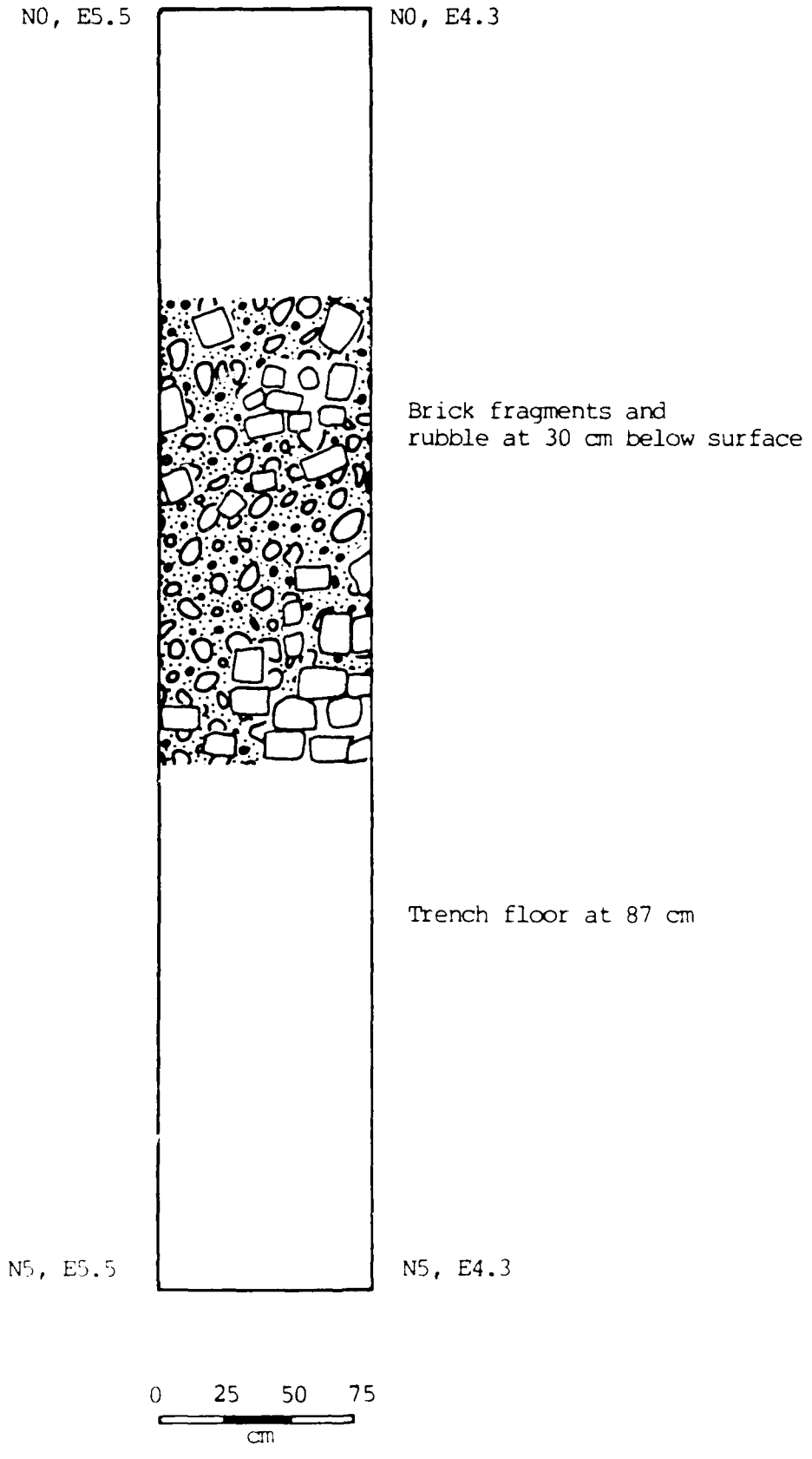
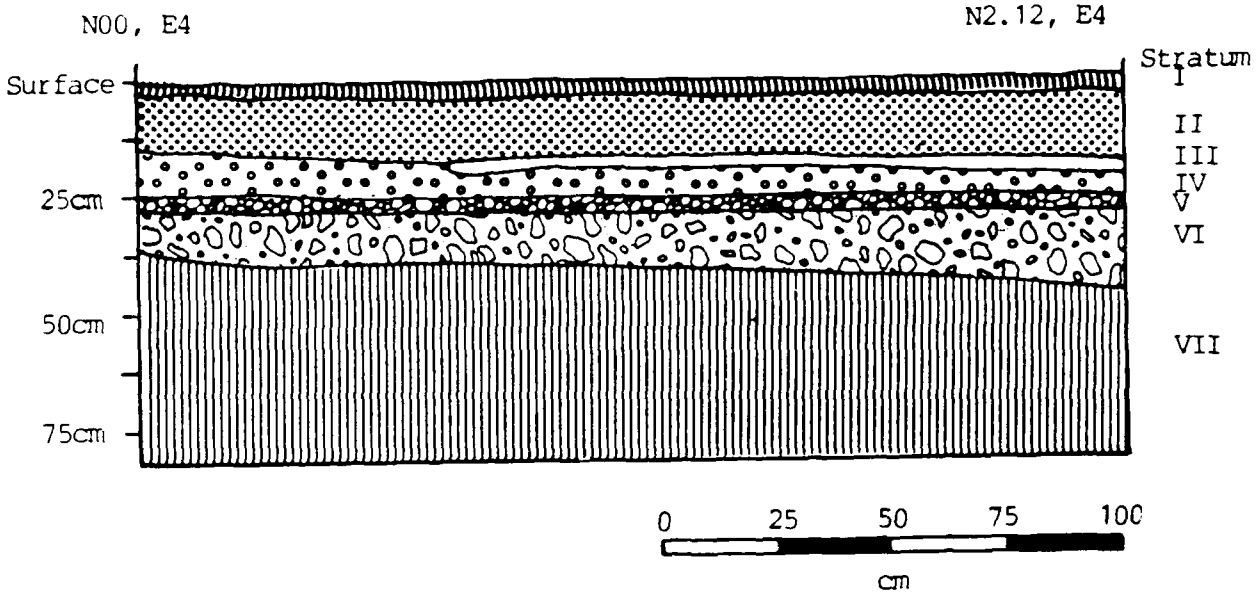


Figure 31. Trench 26, Plan View showing brick fragments and rubble at 30 cm below surface.

(Stratum V), encountered between 30 and 50 cm below surface, depending on the location within the trench. Sterile clay was present to the floor of T26, about 80 cm below surface. A slightly different stratigraphic profile was present along the west wall of T26 (Figure 32), demonstrating the complexity of horizontal deposition across the lot. Here, two additional strata (Strata IV and V) were found to occur between the discontinuous lens of mortar (Stratum III) and the heterogeneous fill of cultural material described above (Stratum VI in the west wall profile). Stratum IV was a lens of ash and cinder which also contained gravel and fragments of slate. Stratum V was a lens of brick rubble that was not well-defined on the adjacent east wall profile. Apparently, Stratum V (west profile) and Stratum VI (east wall profile) represent occupation debris, perhaps associated with the Duvic occupation of Lot 8. However, Mean Ceramic Dates (see below) for T26 suggest that an earlier occupation of the lot also may have been sampled in this trench. Lenses of ash, cinder, mortar, and brick rubble occurring above these strata represent various episodes of burning, destruction and clearing, and redeposition of architectural debris and refuse.

Coordinates for Trench 27 are given in Table 11 (see also Figure 29). The west wall profile of T27, shown in Figure 33, again illustrates the complexity of both the horizontal and vertical depositional units within Lot 8. Below the overburden (Stratum I), alternating strata of clay and silty clay were present. These strata contained a variety of cultural refuse, some of which also occurred within a matrix of ash and cinder. A more detailed stratigraphic section is shown in Figure 34. While no archeological features were exposed in plan view during the excavation of T27, a foundation or footing (designated Feature 128) was exposed in the north wall profile (Figure 35). This brick masonry feature occurred directly beneath a lens of ash and cinder, which also contained brick fragments, ceramics, shale, coal, and rangia shell fragments (Stratum II). The feature consisted of four brick courses resting on top of a wooden beam. Feature 128 was later exposed more clearly in Excavation Unit 22; it is described more fully below.

Coordinates for the third trench excavated in Lot 8 (T28; Figure 29) are given in Table 11. As was the case for T26 and T27, a lens of ash and cinder (Stratum II), which also included brick fragments, coal, and shale, occurred beneath the surficial overburden (Stratum I; see east wall profile illustrated in Figure 36). Three continuous refuse-bearing lenses (Strata III-V) occurred beneath Stratum II. The most extensive was Stratum IV, which consisted of a loamy, black matrix containing ceramics, glass, brick fragments, metal, and bone. In the northern half of T28, this refuse lens occurred above a stratum consisting almost entirely of oyster shells, which was designated Stratum VI. In fact, it is possible that this lens of shells simply represents the first episode in the deposition of Stratum IV. Because of the quantity of refuse debris revealed during the excavation, and in the profile of T28, the decision was made to procure a more systematic sample of the deposit



SQUARE 10, LOT 8, TRENCH 26

West Wall Profile

Figure 32. Stratigraphic profile of Trench 26, west wall, Square 10, Lot 8, Algiers Point Data Recovery Project.

Figure 32. Continued

KEY

Stratum I:	Silty loam overburden with rangia shells, iron fragments, charcoal, brick fragments
Stratum II:	Ash and cinder
Stratum III:	Mortar
Stratum IV:	Silty loam with ash, cinder, slate, gravel
Stratum V:	Brick rubble
Stratum VI:	Silty loam with ash, cinder, iron fragments oyster shells, bone, glass, slate, coal
Stratum VII:	Silty clay loam

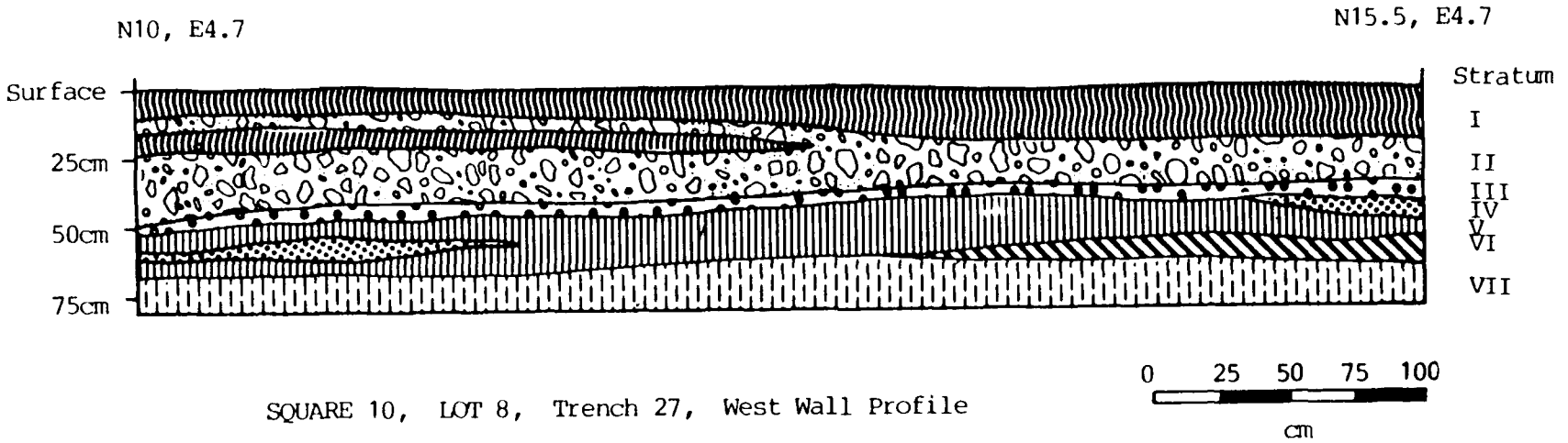
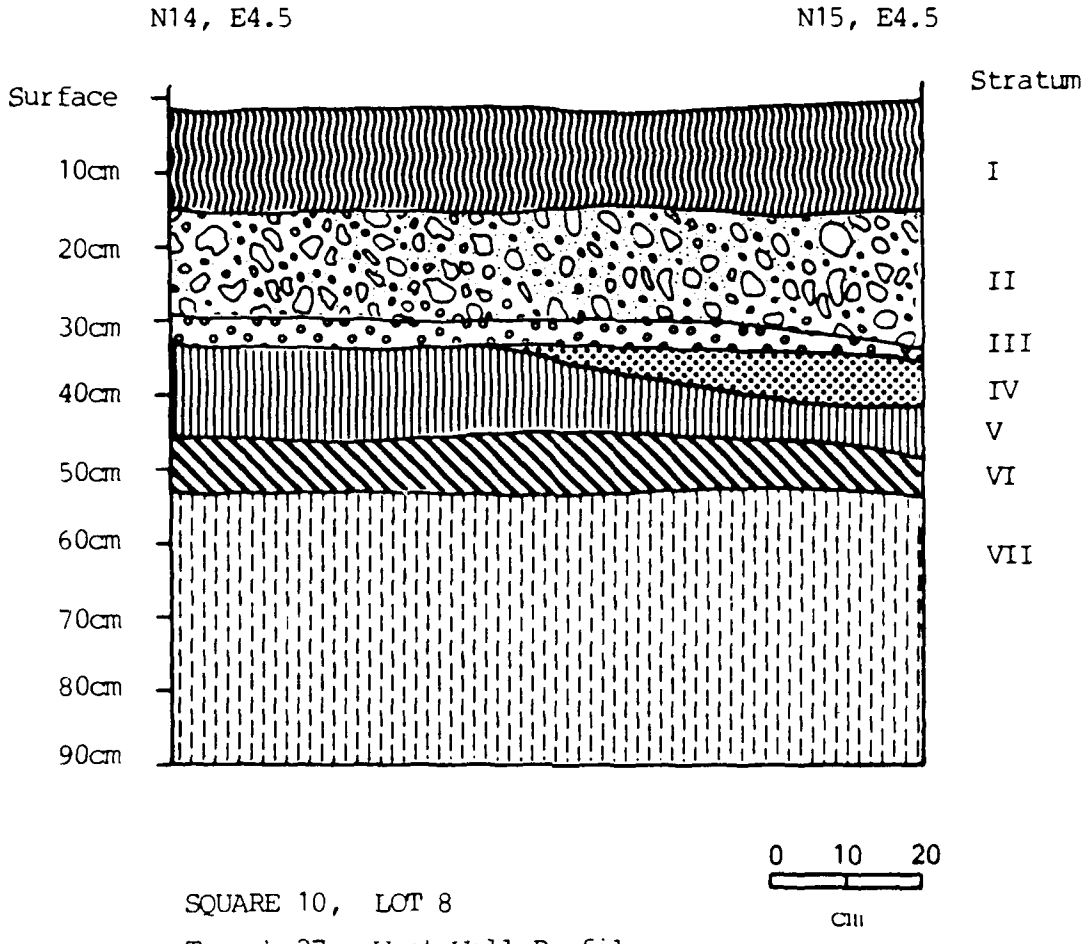


Figure 33. Stratigraphic profile of Trench 27, west wall, Square 10, Lot 8, Algiers Point Data Recovery Project.

Figure 33. Continued

KEY

Stratum I:	Silty loam overburden with rangia shells, iron fragments, charcoal, brick fragments
Stratum II:	Silty loam with ash, cinder, brick fragments, ceramics, coal, shale
Stratum III:	Silty clay with small brick fragments, charcoal flecks, metal fragments, rangia shells
Stratum IV:	Silty loam with ash, cinder, coal, iron fragmants
Stratum V:	Silty clay
Stratum VI:	Silty clay with charcoal flecks, ferrous staining
Stratum VII:	Silty clay loam with charcoal flecks, oyster shells



SQUARE 10, LOT 8

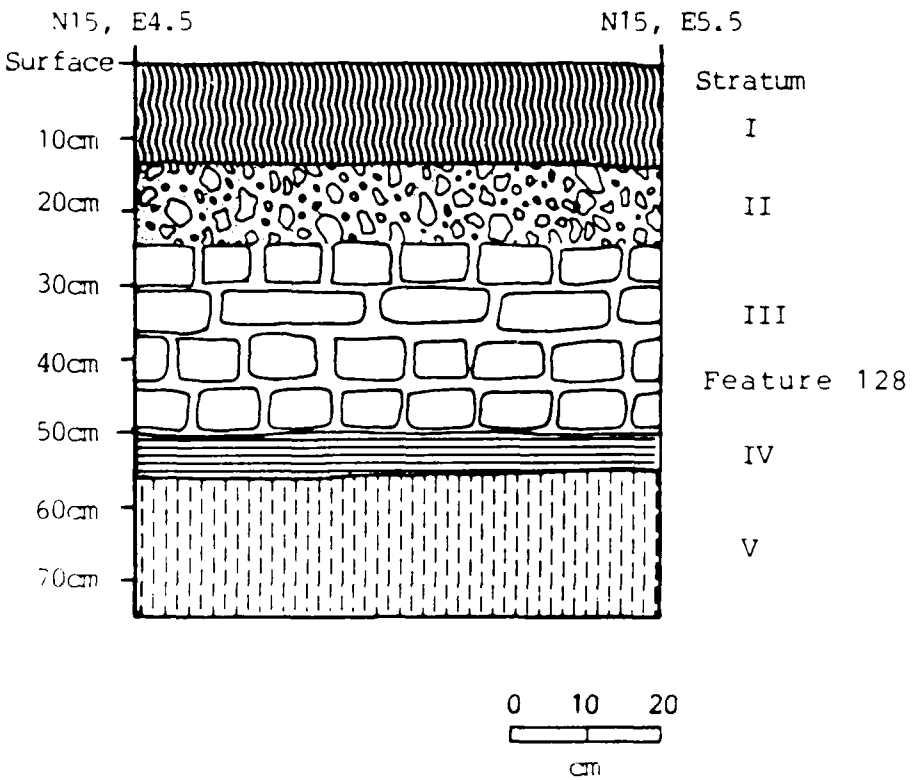
Trench 27, West Wall Profile

Figure 34 . Stratigraphic profile of Trench 27, west wall, Square 10, Lot 8, Algiers Point Data Recovery Project.

Figure 34. Continued

KEY

Stratum I:	Silty loam overburden with rangia shells, iron fragments, charcoal, brick fragments
Stratum II:	Silty loam with ash, cinder, brick fragments, ceramics, coal, shale
Stratum III:	Silty clay with small brick fragments, charcoal flecks, metal fragmetns, sparse rangia shells
Stratum IV:	Silty loam with ash, cinder, coal, iron
Stratum V:	Silty clay
Stratum VI:	Silty clay with charcoal flecks, ferrous staining
Stratum VII:	Silty clay loam with charcoal flecks, oyster shells



SQUARE 10, LOT 8

Trench 27, North Wall

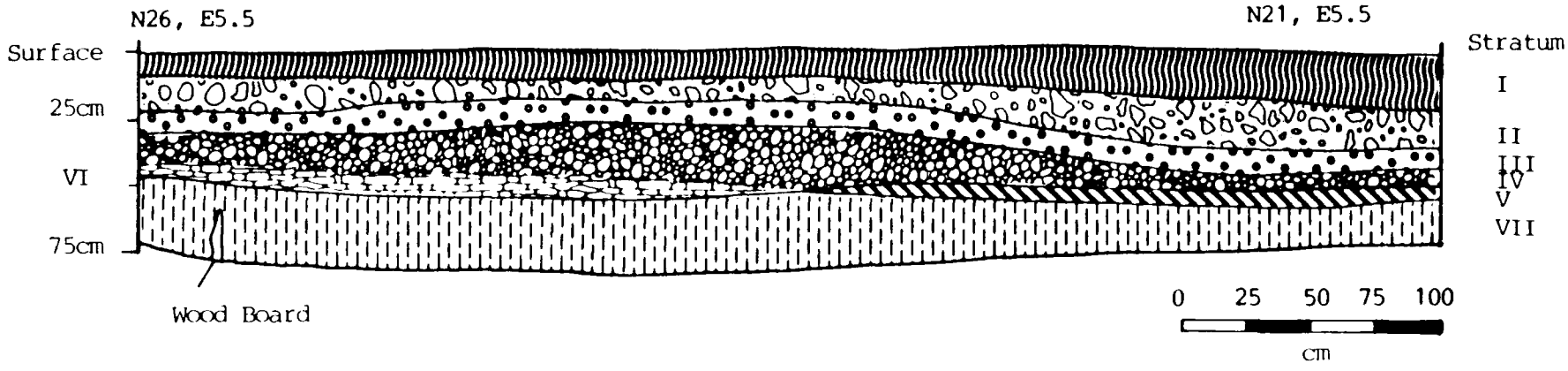
Feature 128

Figure 35. Stratigraphic profile of Trench 27, north wall, Square 10, Lot 8, Algiers Point Data Recovery Project, showing the location of Feature 128.

Figure 35. Continued

KEY

Stratum I:	Silty loam with rangia shells, iron, fragments, charcoal, brick fragments
Stratum II:	Silty loam with ash, cinder, brick fragments, ceramics, shale, coal, rangia shells
Stratum III:	Brick masonry
Stratum IV:	Wooden beam
Stratum V:	Silty clay loam with charcoal flecks, oyster shells



SQUARE 10, LOT 8, TRENCH 28

East Wall Profile

Figure 36. Stratigraphic profile of Trench 28, east wall, Square 10, Lot 8, Algiers Point Data Recovery Project.

Figure 36. Continued

KEY

Stratum I:	Silty loam overburden with rangia shells, iron fragments, charcoal, brick fragments
Stratum II:	Silty loam with ash, cinder, brick coal, shale
Stratum III:	Silty clay with small brick fragments, charcoal flecks, metal fragments, oyster and rangia shells
Stratum IV:	Silty loam with ceramics, glass, brick fragments, metal fragments, bone
Stratum V:	Silty clay loam with charcoal flecks, ferrous staining, ceramics, shell
Stratum VI:	Oyster shells
Stratum VII:	Silty clay loam with charcoal flecks, ferrous staining

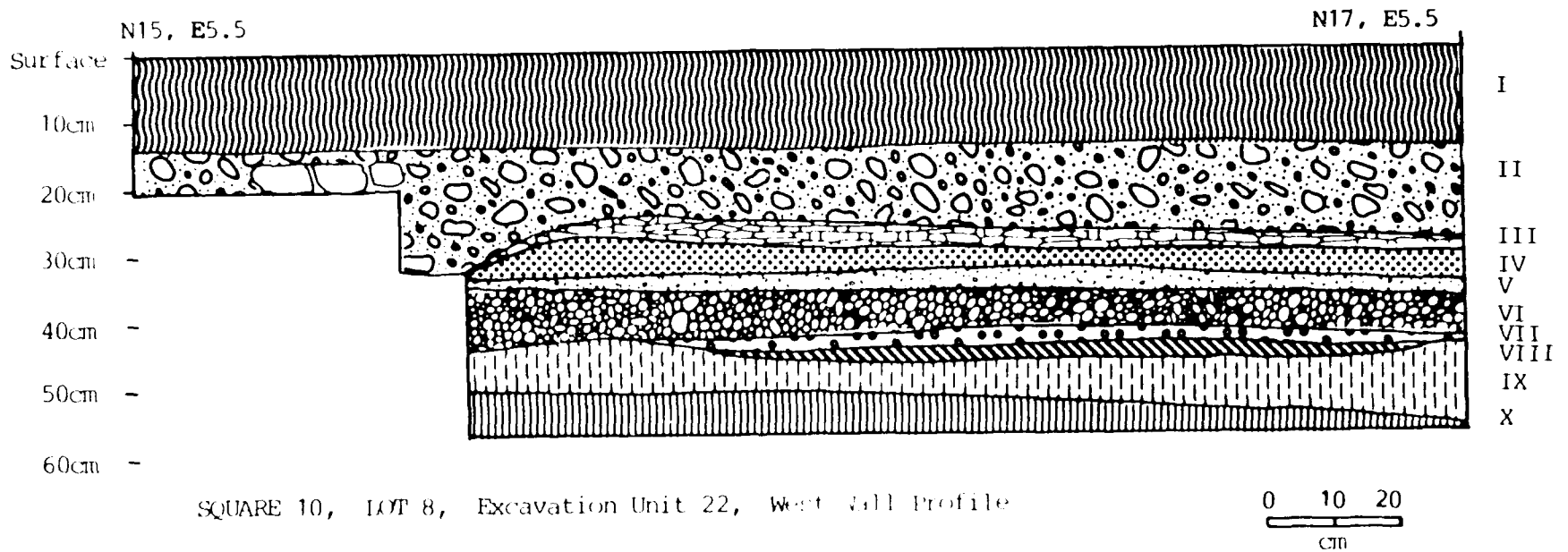


Figure 38. Stratigraphic profile of Excavation Unit 22, west wall, Square 10, Lot 8, Algiers Point Data Recovery Project.

Figure 38. Continued

KEY

Stratum I:	Silty loam overburden with rangia shells, iron fragments, charcoal, brick fragments, glass
Stratum II:	Silty loam with ash, cinder, brick fragments, metal fragments, oyster shells, coal
Stratum III:	Oyster shells with ferrous staining, cinder, ash
Stratum IV:	Silty clay with ferrous staining
Stratum V:	Silty clay with ash, cinder, metal fragments
Stratum VI:	Silty clay with oyster shells, crushed brick fragments, metal fragments
Stratum VII:	Silty clay with coal, ash, cinder, brick fragments
Stratum VIII:	Silty clay
Stratum IX:	Silty clay with brick fragments, oyster shell, charcoal flecks
Stratum X:	Silty Clay loam

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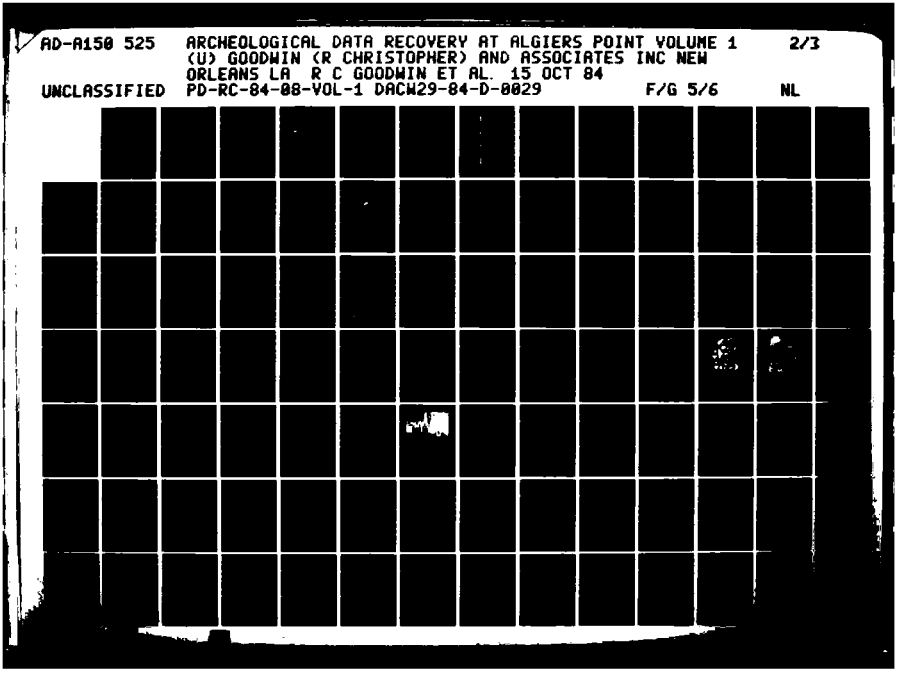
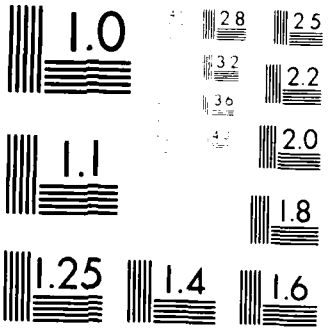




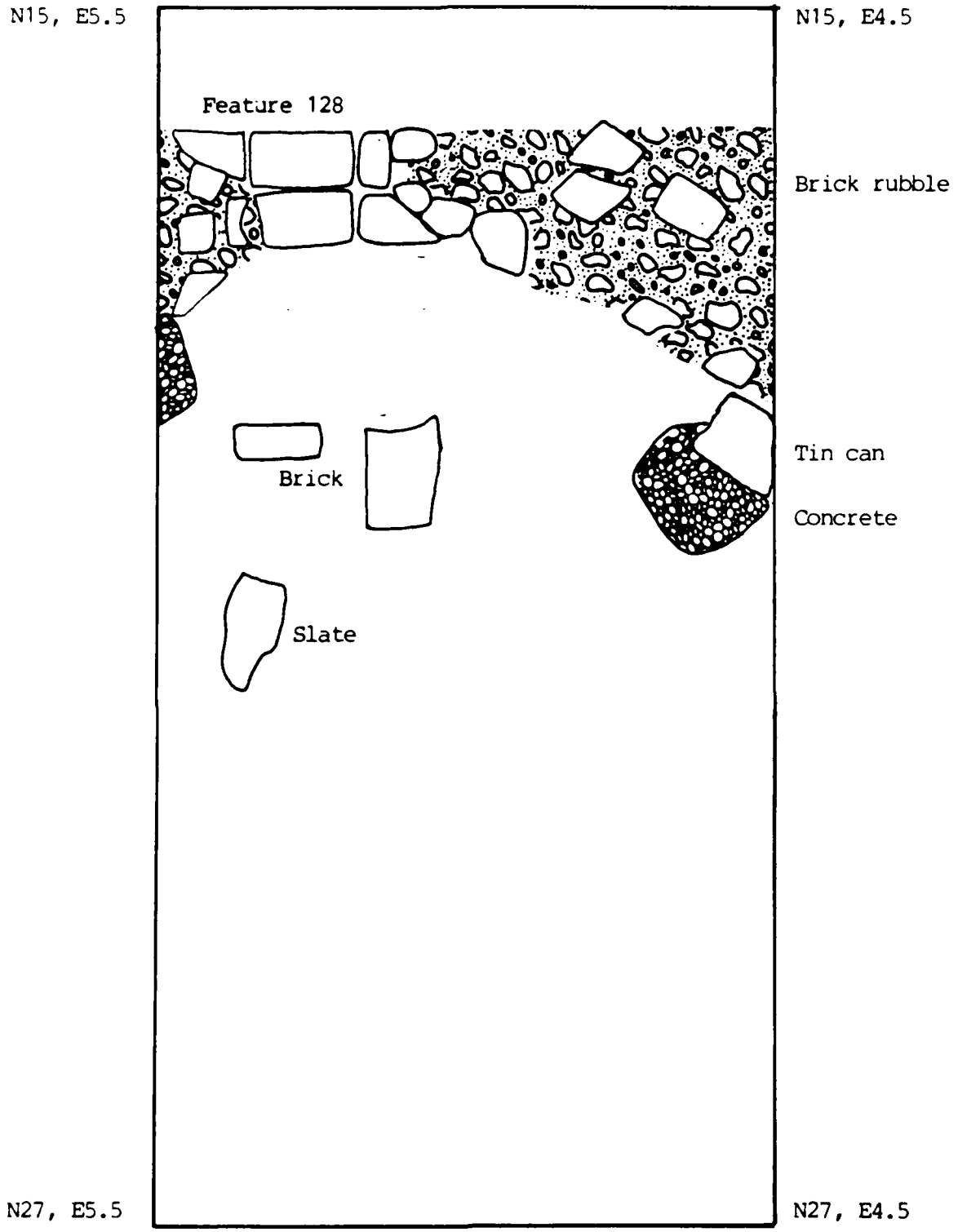
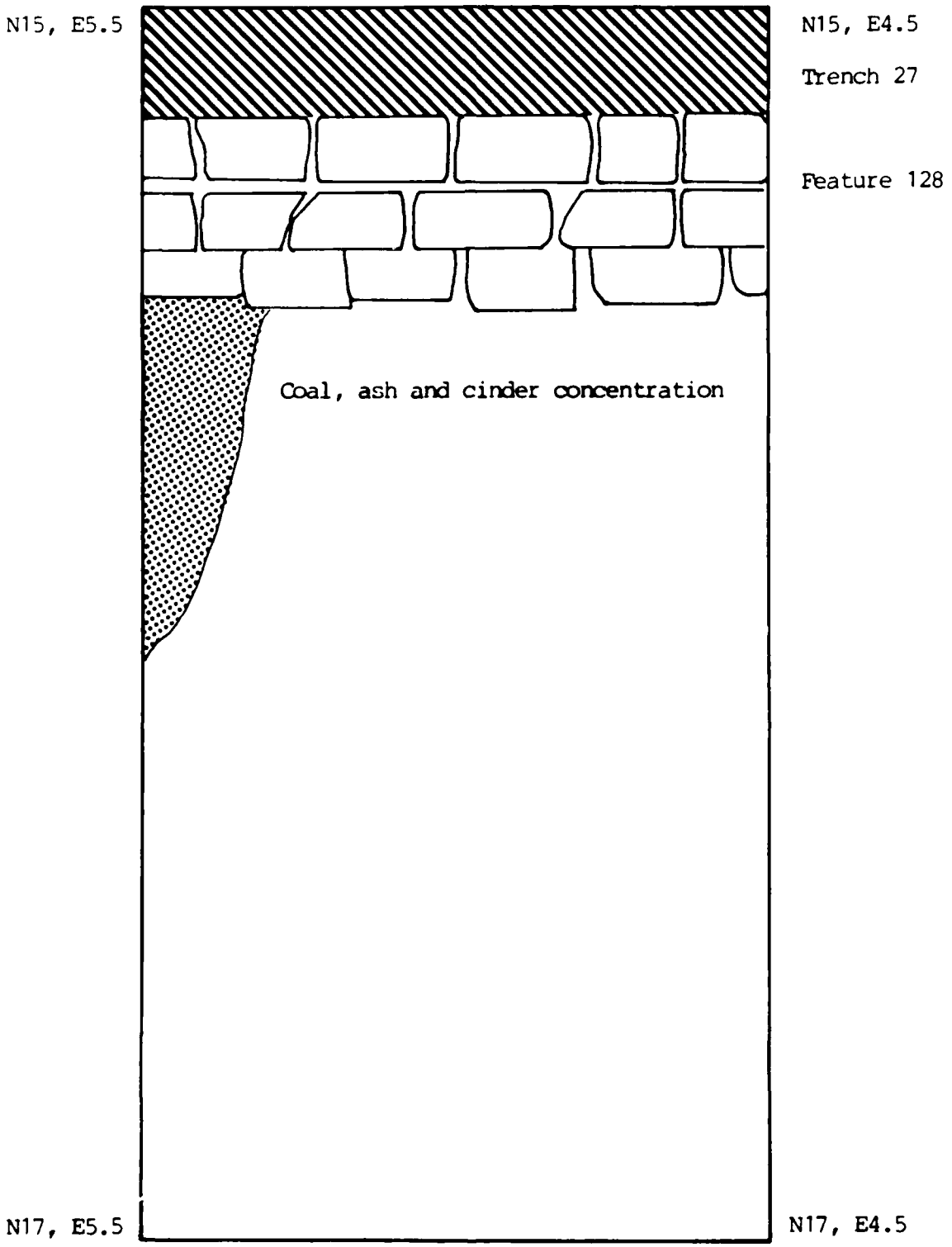


Figure 39. Plan of Excavation Unit 22, at 25 cm below surface, showing Feature 128.



SQUARE 10, LOT 8,
Excavation Unit 22
Plan View of Floor
at 62 cm below surface

0 10 20
cm

Figure 40. Excavation Unit 22, Plan View of Floor at 62 cm below surface, showing Feature 128.

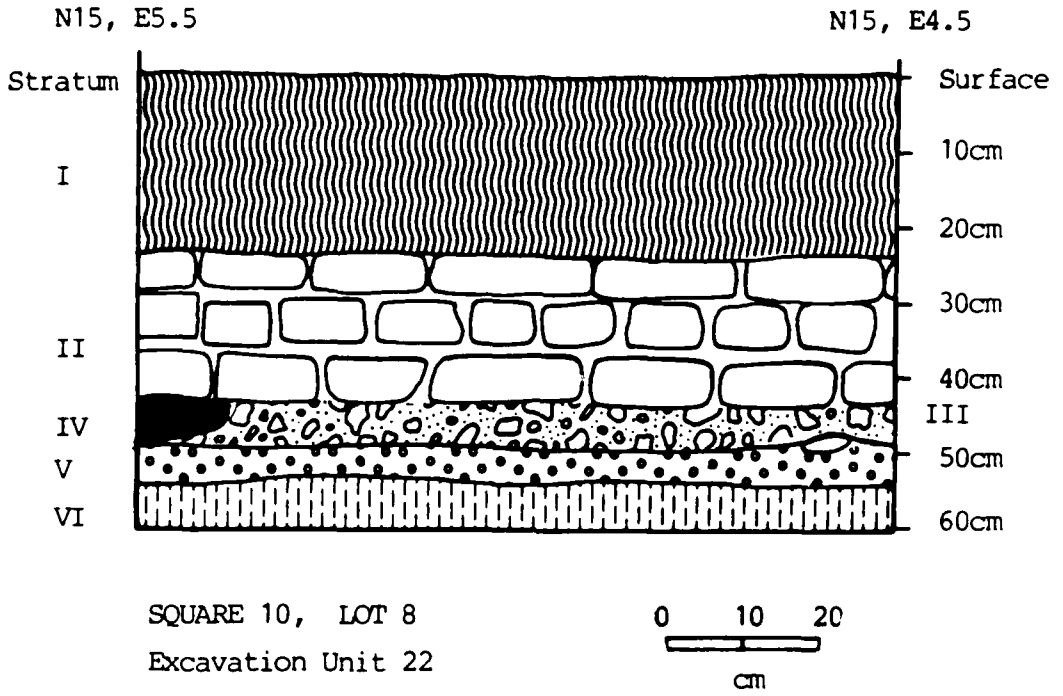


Figure 41 . Stratigraphic profile of Excavation Unit 22, south wall, Square 10, Lot 8, Algiers Point Data Recovery Project, showing the location of Feature 128.

Figure 41. Continued

KEY

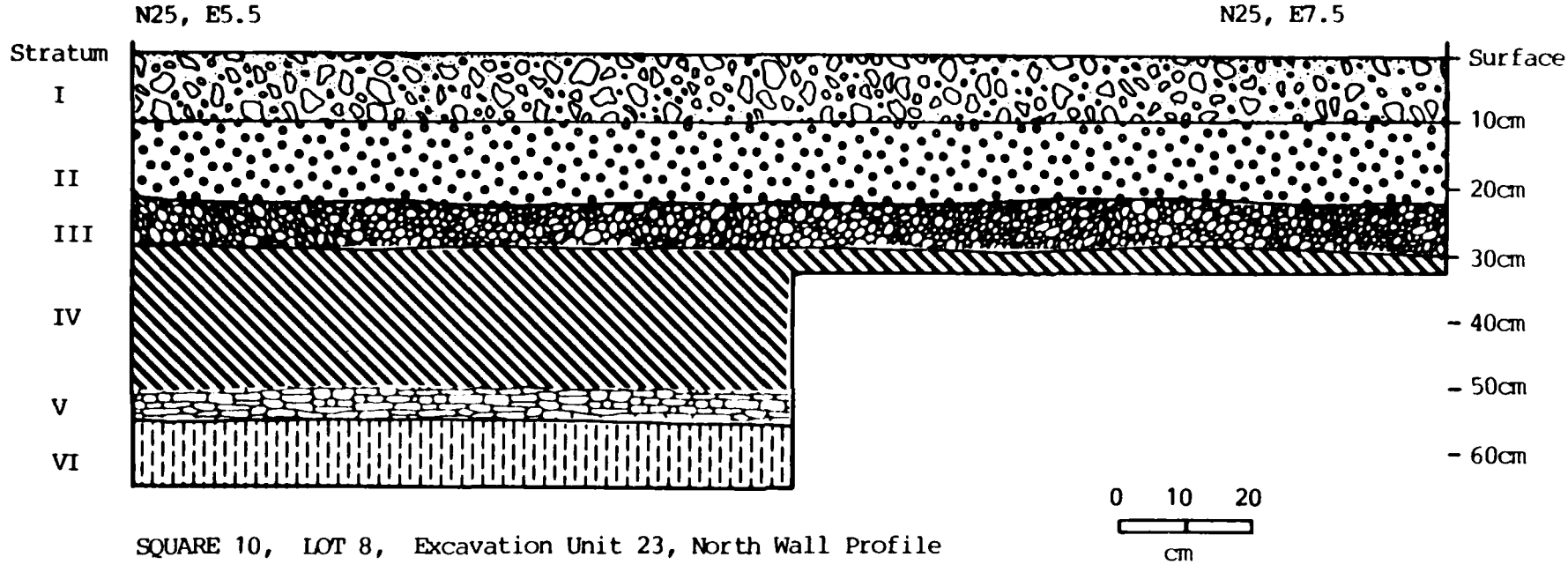
Stratum I:	Silty clay overburden with rangia shells, iron fragments, charcoal, brick fragments
Stratum II:	Silty loam with ash, cinder
Stratum III:	Mortar
Stratum IV:	Silty loam with ash, cinder, metal fragments, gravel, glass, ceramics, coal, oyster shells, slate
Stratum V:	Silty clay with crushed brick fragments, oyster shells, charcoal flecks
Stratum VI:	Silty clay loam with small brick fragments, shell and charcoal flecks in the upper centimeters

early occupation of Lot 8 that was not described during previous archival and historical research efforts.

As noted above, Excavation Unit 23 was located to provide a more extensive sample of the refuse lenses exposed in T28. Therefore, a 1 x 2 excavation unit (E23) was positioned immediately adjacent to T28, near its northern end (Figure 29). Grid coordinates for E23 are given in Table 11. As can be seen from the north wall profile of E23 (Figure 42), a series of six strata can be correlated with those defined for T28, including a shell lens (Stratum V) which occurs directly beneath a thick lens of cultural refuse. However, a largely intact brick pavement was encountered at about 33 cm below surface, which was designated Feature 135; it is shown in plan view in Figure 43. In addition to the bricks, a large fragment of cut stone occurred in the northeast (grid) corner of E23, at the same level as the bricks. An oval shaped disturbance of unknown origin was present at the center of the excavation unit; this intrusion has destroyed a portion of F135. F135 is shown in cross-section in Figure 44. The brick pavement was only one course deep. A lens of mortar was found directly beneath these bricks, which in turn rested directly on top of the thick refuse-bearing deposit that had been targeted for more extensive sampling.

Subsurface testing in Lot 8 consisted of the excavation of three backhoe trenches (T26-T28) and of three 1 x 2 m hand excavation units (E21-23). Two brick features (F128 and F135) were recovered during these field investigations. Feature 128 was exposed in the north wall profile of T27, and it was more fully exposed later in E22 (Figures 41 and 42). Feature 128 was a rectangular brick pier with an associated mean ceramic date of 1848.8 (Table 29; see Chapter 7). The position of this feature in Lot 8 does not correspond to that of any standing structures illustrated on the 1896 Sanborn Maps. The mean ceramic date for F128 suggests the presence of an earlier structure on the property, the existence of which was not revealed during previous archival research (Fritz and Reeves 1983). Feature 135 was a brick pavement located in E23, adjacent to T28 (Figure 44). Mean Ceramic Dates associated with E23 include dates of 1845.1 for Stratum VI, and 1848.3 for Stratum IV (Table 29; see Chapter 7). A similar date was obtained from T28 (Table 29; see Chapter 7). These dates indicate that Features 135 and 128 are of equivalent age. Again, the location of F135 does not correspond to the position of standing structures on the 1896 Sanborn Map, and suggest further gaps in the background archival research (Fritz and Reeves 1983). A final feature (F136) was a brick wall exposed near the surface, and apparently was derived from the later Johnson Iron Works occupation of Lot 8.

Mean Ceramic Dates from features, excavation units, and from backhoe trenches considerably antedate documented evidence of standing structures on Lot 8. In addition to the Mean Ceramic Dates (MCDs) discussed above, Trench 26 and Excavation Unit 21 yielded MCDs ranging from 1809.6 to 1852.5. Both E21 and T26 apparently are located within Francois Duvic's blacksmith shop as shown in the 1896 Sanborn Map. However, the Duvic occupation of Lot 8 dates from after 1860. Given the ceramic dating



SQUARE 10, LOT 8, Excavation Unit 23, North Wall Profile

Figure 42 . Stratigraphic profile of Excavation Unit 23, north wall, Square 10, Lot 8, Algiers Point Data Recovery Project.

Figure 42. Continued

KEY

Stratum I:	Silty loam overburden with rangia shells, iron fragments, charcoal, brick fragments
Stratum II:	Silty loam with ash, cinder, brick fragments, coal, shale
Stratum III:	Silty clay with small brick fragments, charcoal flecks, metal fragments, oyster and rangia shells
Stratum IV:	Silty loam with ceramics, glass, brick fragments, metal fragments, bone
Stratum V:	Oyster shells
Stratum VI:	Silty clay loam with charcoal flecks, ferrous staining

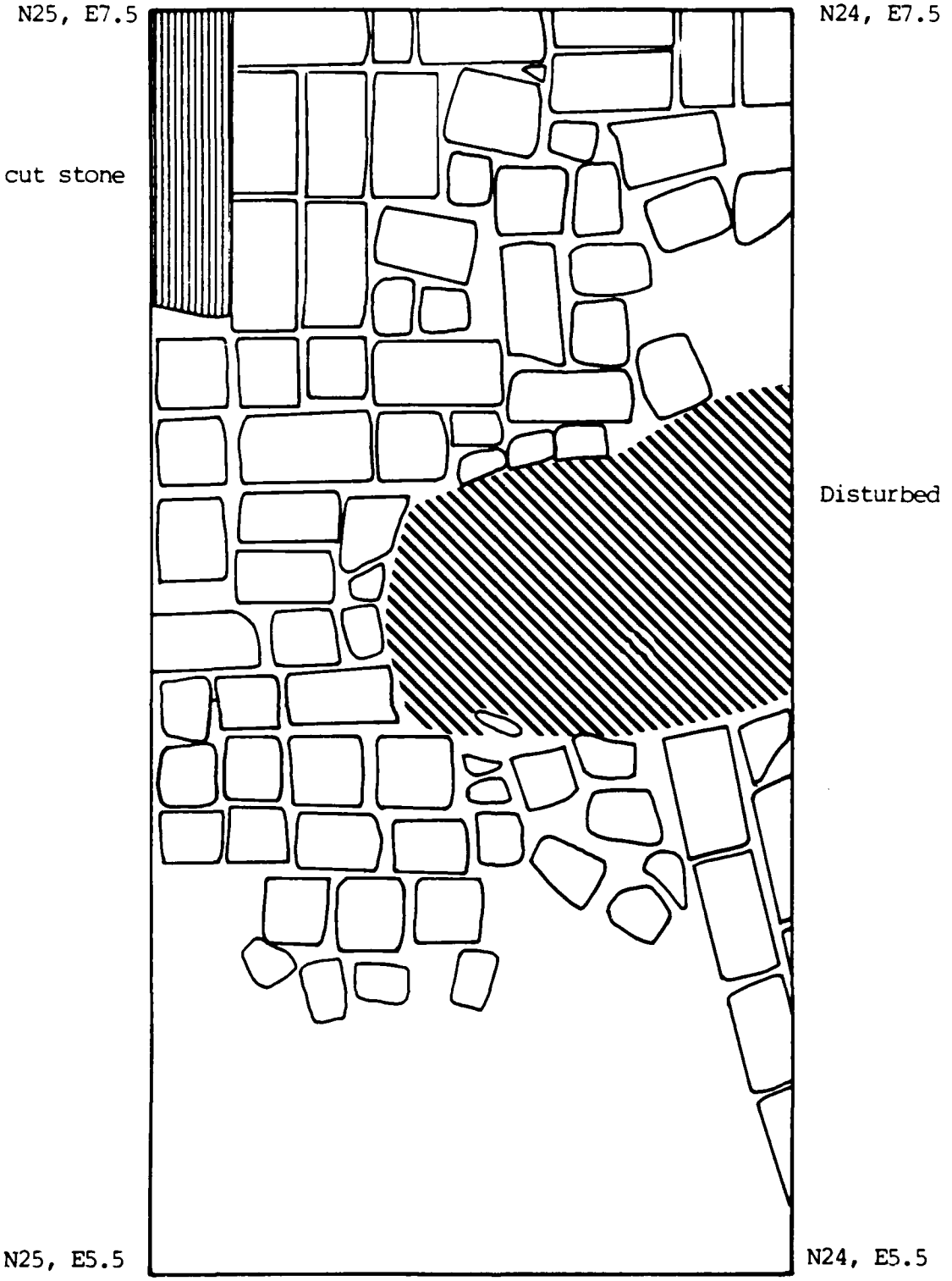
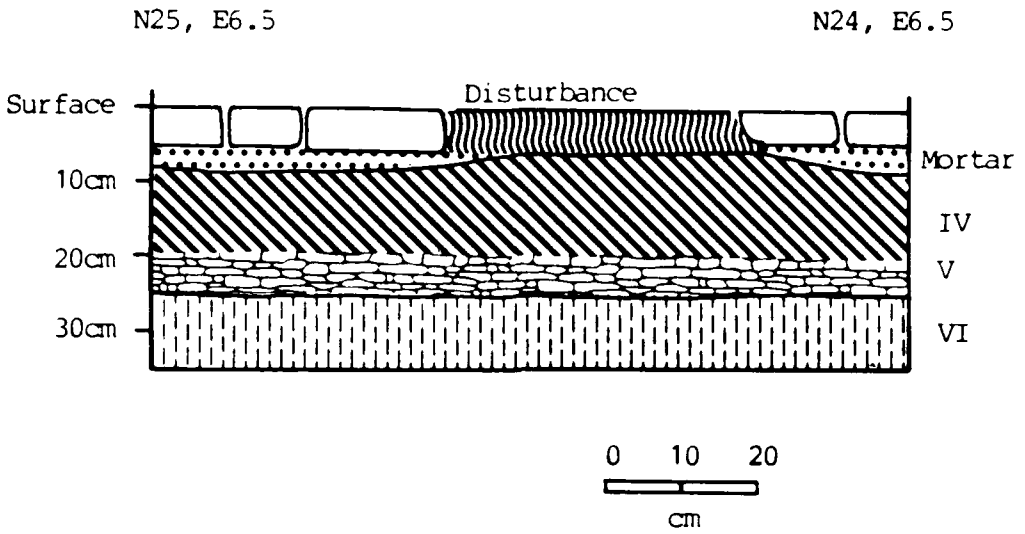


Figure 43. SQUARE 10, LOT 8
Excavation Unit 23
Plan View
45-60 cm below surface

0 10 20
cm



SQUARE 10, LOT 8, Excavation Unit 23,
East Wall Profile, Feature 135

Figure 44 . Stratigraphic profile of Excavation Unit 23, east wall, Square 10, Lot 8, Algiers Point Data Recovery Project, showing the location of Feature 135.

Figure 44. Continued

KEY

Stratum IV:	Silty loam with ceramics, glass, brick fragments, metal fragments, bone
Stratum V:	Oyster shells
Stratum VI:	Silty clay loam with charcoal flecks, ferrous staining

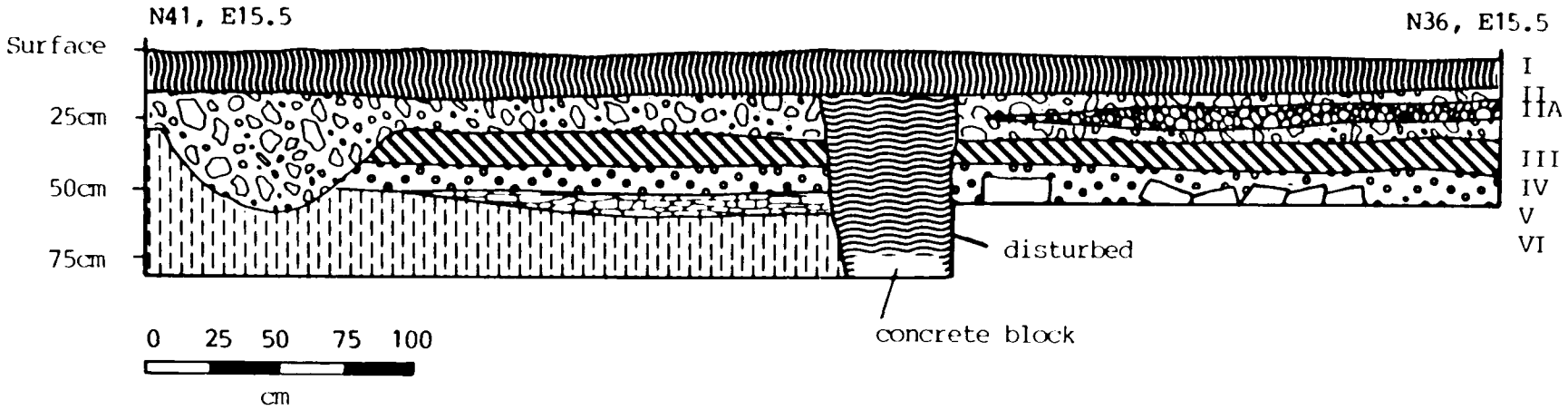
evidence, the archeological record from Lot 8 appears to document changing nineteenth century refuse disposal patterns at Algiers Point. The more recent pattern included intensive policing of residential and commercial areas, and the wholesale removal of refuse to secondary disposal sites. The Mississippi River may well have provided this latter and unknown context. During the nineteenth century, waste from the city of New Orleans commonly was disposed in the Mississippi River.

Lot 6

As was the case for Lot 8, field investigations in Lot 6 were designed to recover subsurface structural features and to sample secondary refuse associated with documented historic occupation of the lot. In particular, three tenant houses, shown on the 1903 Sanborn Insurance maps, were known to have been present. In Lot 6, just downriver from Lot 8 (Figure 29), four backhoe trenches (T29 - 32) and three hand excavated units (E24 - 26) were excavated. Three trenches (T29-T31) were placed N-S (grid) along the E15.5 grid line (Figure 29). An additional backhoe trench, T32, was placed normal to this line of trenches at the northern extremity of Lot 6. Again, about five meters separated each of the trenches.

Coordinates for Trench 29 are given in Table 11, and the trench is mapped in Figure 29. The east wall profile of T29 is shown in Figure 45. Below a silty overburden (Stratum I) consisting of recent overbank deposits, five distinct strata containing various quantities of cultural debris were observed. Stratum IIa, present only in the southern half of the trench, was a deposit of brick rubble and rock within a matrix of ash and cinder. This deposit appears to derive from the Johnson Iron works. A level of clay with scattered rock and charcoal (Stratum III) separated this deposit from another lens (Stratum IV) which contained a dense matrix of artifactual and ecofactual debris, including brick fragments, ceramics, wood, bone, oyster shell, rangia shell, glass, and metal. Within Stratum IV, at 45 cm below surface, two distinct concentrations of brick masonry were encountered. These brick features, designated F129 and F130 were cleaned, mapped, and photographed at 52 cm below surface (Figure 46). A hand excavation unit eventually was placed adjacent to T29, in order to expose more fully these features and to sample the associated occupational debris. A recent intrusion also was noted in T29 (Figure 45). A large concrete block, apparently an electric line casing, was encountered at the base of this disturbance at about 80 cm below surface.

The location of Trench 30 is shown in Figure 29, and grid coordinates for the trench are given in Table 11. The west wall profile of T30 is shown in Figure 47. One lens of cultural refuse (Stratum II), including two brick features, occurred beneath a thick silty clay overbank deposit (Stratum I). Stratum II was a silty clay containing bone, shale, oyster shell, large brick fragments, ceramics, glass, burned wood, metal, and mortar fragments. Within this matrix, two brick features,



SQUARE 10, LOT 6, TRENCH 29, East Wall Profile

Figure 45. Stratigraphic profile of Trench 29, east wall, Square 10, Lot 6, Algiers Point Data Recovery Project.

Figure 45. Continued

KEY

Stratum I:	Silty loam overburden with ferrous staining
Stratum II:	Silty loam with ash, cinder, glass, bone, ceramics
Stratum IIa:	Brick rubble with rock, ash, cinder
Stratum III:	Silty clay with scattered rock, charcoal
Stratum IV:	Silty loam with brick fragments, ceramics, wood, bone, oyster and rangia shells, glass, metal fragments
Stratum V:	Brick rubble with oyster shells
Stratum VI:	Silty clay loam with ferrous staining

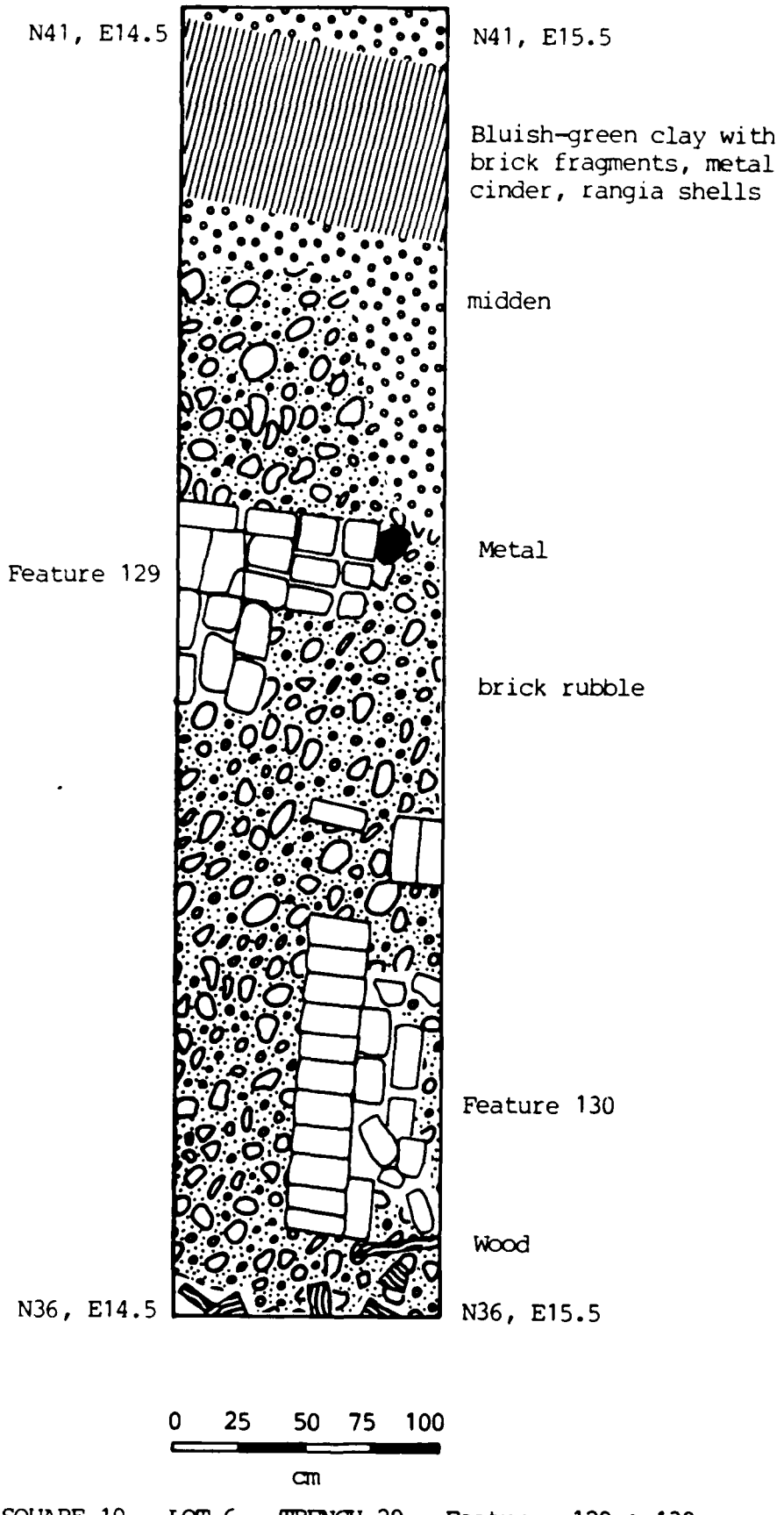


Figure 46. SQUARE 10, LOT 6, TRENCH 29, Features 129 & 130
Plan View at 52 cm

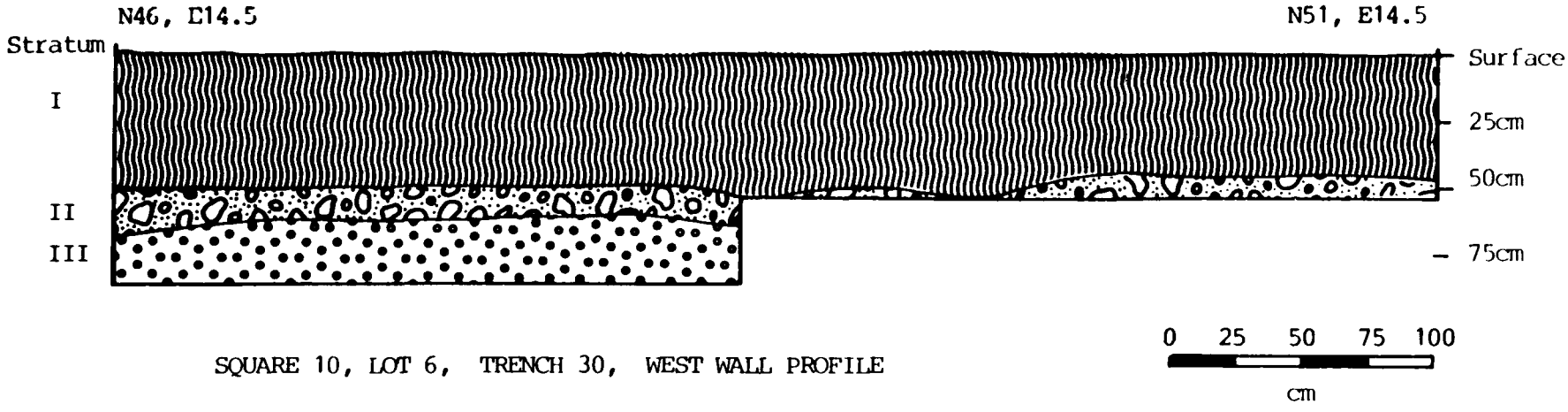


Figure 47. Stratigraphic profile of Trench 30, west wall, Square 10, Lot 6, Algiers Point Data Recovery Project.

Figure 47. Continued

KEY

Stratum I:	Silty clay overburden with tan clay inclusions, ferrous staining, scattered brick fragments
Stratum II:	Silty clay with bone, shale, oyster shell, brick fragments, ceramics, charcoal, iron fragments, sparse mortar
Stratum III:	Silty clay loam with brick fragments in upper 5-10 centimeters

designated F131 and F132, were encountered at about 50 cm below surface. Their plan and orientation E-W across T30 are shown in Figure 48, mapped at 54 cm below surface. Stratigraphically, these two brick features occur in the same position as F129 and F130 from T29. Only the more recent debris of the Johnson Iron Works is absent from T30.

Backhoe Trench 31 was located five meters to the north of T30 along the E15.5 grid line (Figure 29). Grid coordinates for T31 are given in Table 11. The east wall profile of T31 is given in Figure 49. In T31, two strata containing dense deposits of artifactual and cultural debris (Strata II and III) were present below a thick silty clay overbank deposit (Stratum I). A disturbed zone, situated obliquely across the profile in Figure 49, occurred within Stratum I, and may be related to a Johnson Iron Works railroad spur track. Portions of two brick features were encountered in Stratum III, which was a silty clay containing crushed brick fragments, iron nails, ceramics, coal, glass, bone, metal, oyster shell, and mortar fragments. These features, encountered at about 60 cm below surface, were designated F133 and F134. The two features are shown in a detail plan of T31 (Figure 50). A cross section of F134 is shown in Figure 51, which shows the brick feature to have been two courses in deep. A 1 x 2 meter hand excavation unit (E26) was placed adjacent to T31 in order to expose additional portions of the features and to sample the surrounding cultural debris (see below).

Backhoe Trench 32 was situated normal to Trenches 29-31, along the N60 grid line (Figure 29). Grid coordinates for T32 are given in Table 11. The north wall profile of T32 is shown in Figure 52. The silty clay overbank deposit observed in Trenches 29-31 also was present in T32; it attained its greatest thickness in this trench. This deposit (Strata I and III) was separated by a thin lens of oxidized iron (Stratum II), again probably from Johnson Iron Works. Below Stratum III and Stratum IV (a disturbed zone), two lenses containing rich deposits of artifactual and ecofactual remains were present (Strata V and VI). Stratum V was a silty clay containing burned wood, ash, abundant oyster shell, brick fragments, ceramics, glass, metal, and scattered bone. Stratum VI was a sandy clay with ferrous stains which contained a similar artifactual and ecofactual inventory. The density of remains in Stratum VI, however, were greater than that of Stratum V. These lenses of cultural refuse occurred immediately above sterile clay, present from about 100 cm below surface to the floor of the trench at about 140 cm below surface. Unlike the previously described trenches from Lot 6, no structural remains were encountered in T32, even if the lenses of cultural refuse may correlate with those revealed elsewhere in Lot 6.

Excavation Unit 24 was located adjacent to Trench 29 in order to provide a more controlled sample of artifactual remains from the refuse-bearing strata revealed in T29 (Figure 29). Grid coordinates for E24 are given in Table 11. The north wall profile of E24 is shown in Figure 53. Excavations of E24 failed to recover additional evidence of structural remains

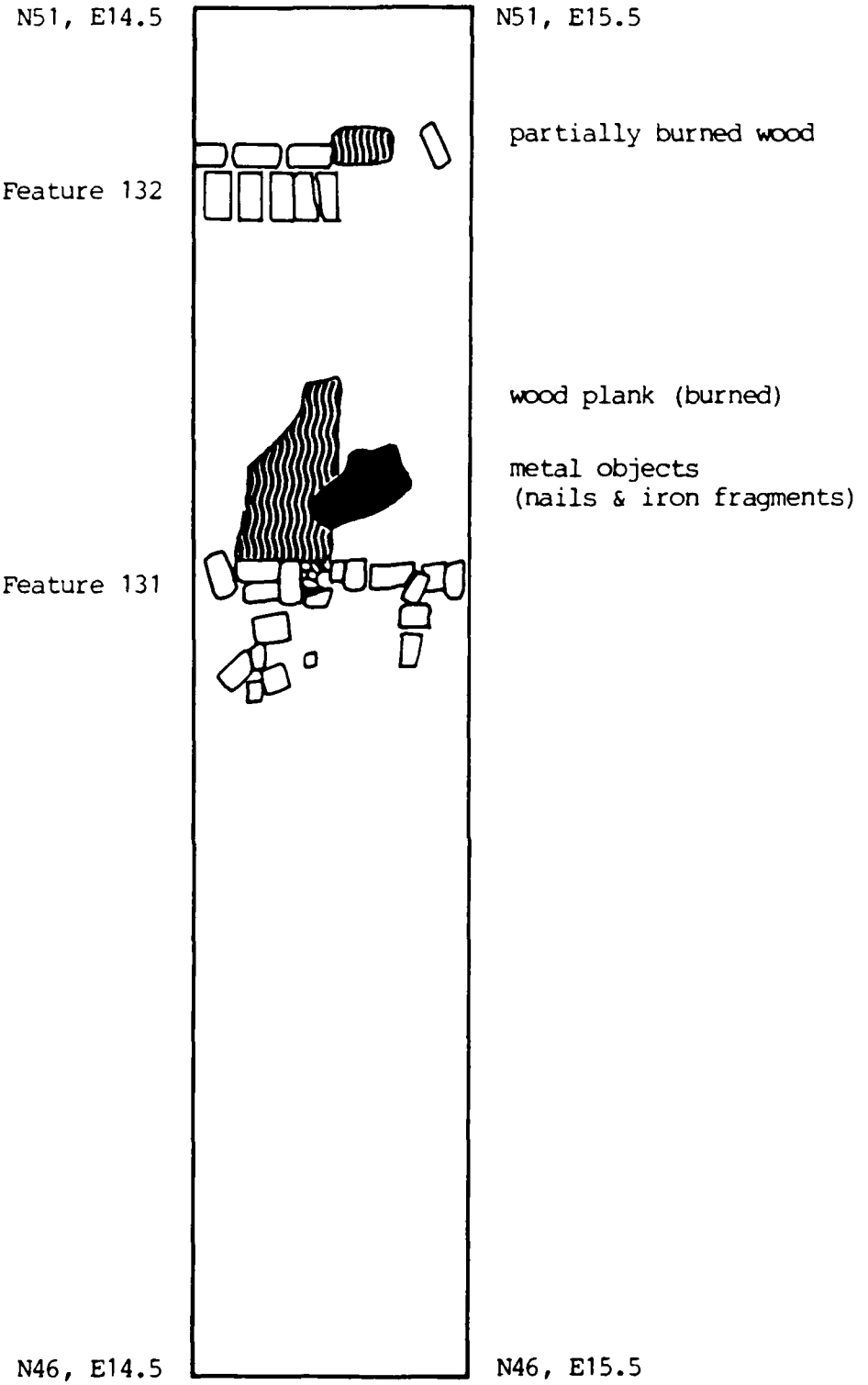


Figure 48.
SQUARE 10, LOT 6, TRENCH 30, Features 131 & 132,
Plan View at 54 cm below surface

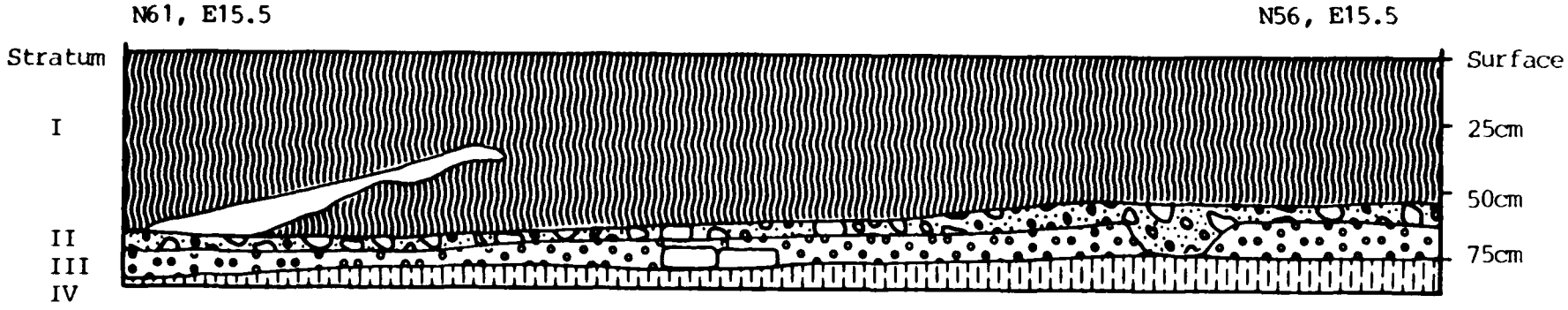
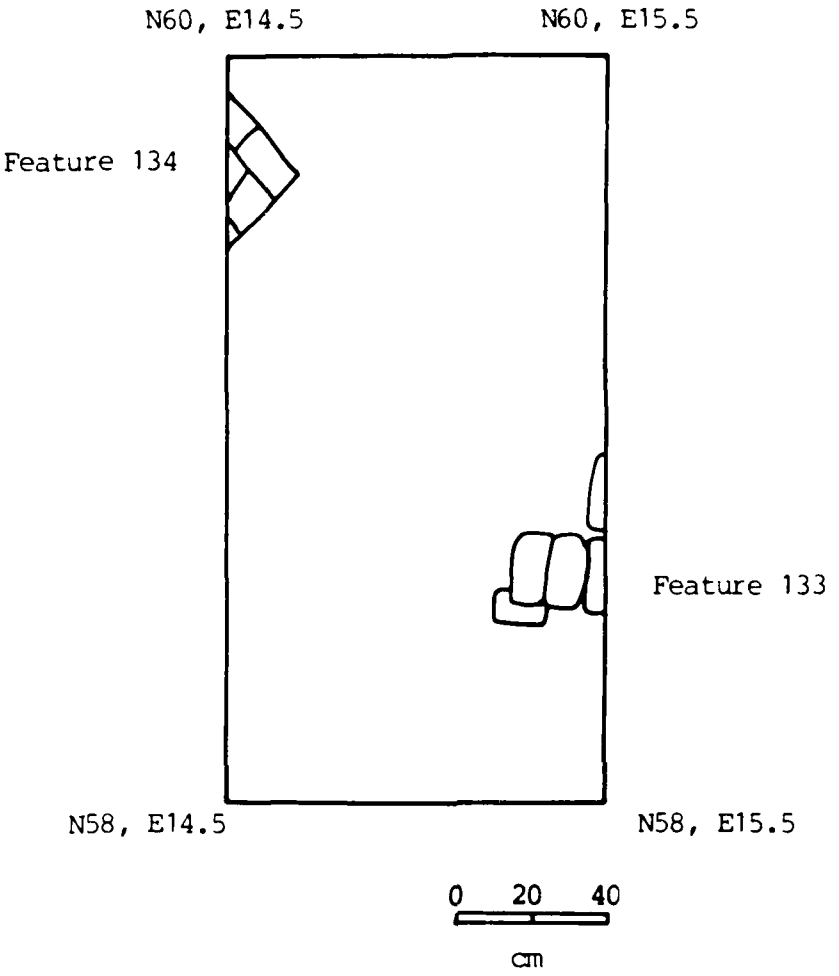


Figure 49. Stratigraphic profile of Trench 31, east wall, Square 10, Lot 6, Algiers Point Data Recovery Project.

Figure 49. Continued

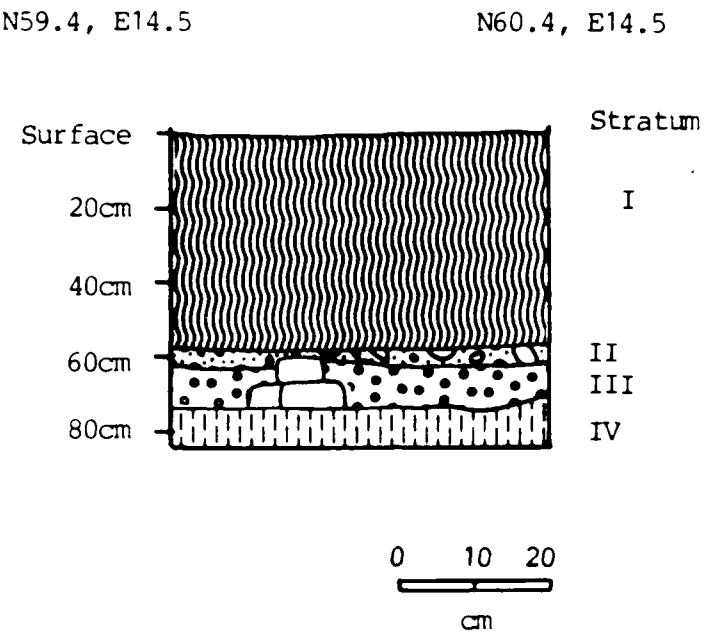
KEY

Stratum I:	Silty clay overburden with brick fragments, rangia shells, charcoal, iron fragments
Stratum II:	Silty loam with ash, cinder, brick fragments, iron fragments, marbles, oyster shells, glass, slate, ceramics
Stratum III:	Silty clay with brick fragments, iron nails, ceramics, coal, glass, oyster shells, mortar
Stratum IV:	Silty clay loam



SQUARE 10, LOT 6, TRENCH 31, PLAN VIEW

Figure 50. Plan View of Square 10, Lot 6, Trench 31, at 60 cm below surface.



SQUARE 10, LOT 6, TRENCH 31, WEST WALL
Feature 134

Figure 51. Stratigraphic profile of Trench 31, west wall, Square 10, Lot 6, Algiers Point Data Recovery Project, showing the location of Feature 134.

Figure 51. Continued

KEY

Stratum I:	Silty clay overburden with brick fragments, rangia shells, charcoal, iron fragments
Stratum II:	Silty clay matrix with ash, cinder, brick fragments, iron fragments, marbles, oyster shells, glass, slate, ceramics
Stratum III:	Silty clay with brick fragments, oyster shells
Stratum IV:	Silty clay loam

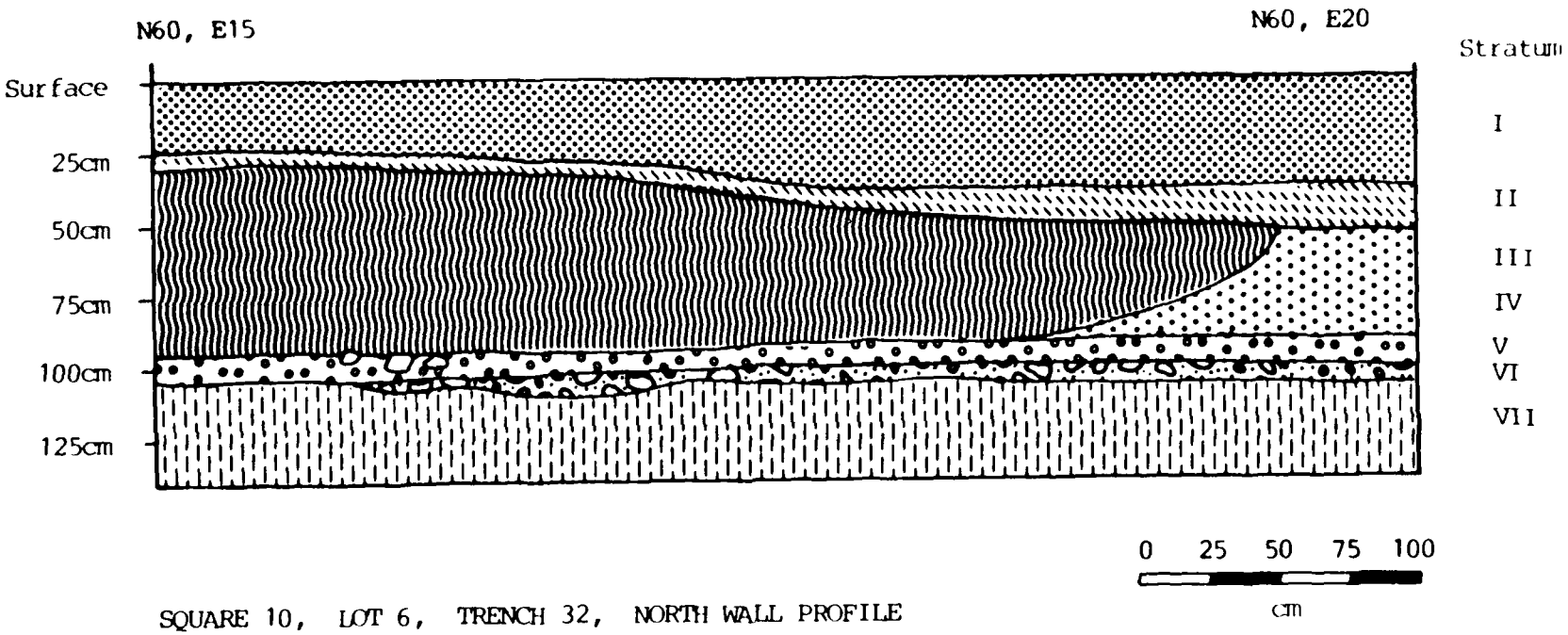


Figure 52. Stratigraphic profile of Trench 32, north wall, Square 10, Lot 6, Algiers Point Data Recovery Project.

Figure 52. Continued

KEY

Stratum I:	Silty clay overburden with rangia at surface
Stratum II:	Silty loam with ferrous staining, iron fragments
Stratum III:	Silty clay with charcoal f'ecks, ferrous staiing, scattered oyster shells and brick fragments
Stratum IV:	Silty clay with scattered pebbles (disturbed)
Stratum V:	Silty clay with charcoal, ash, oyster shells, brick fragments, ceramics, glass, metal fragments, bone
Stratum VI:	Sandy clay with ferrous staining, oyster shells, ceramics, glass, bone, charcoal
Stratum VII:	Silty clay loam

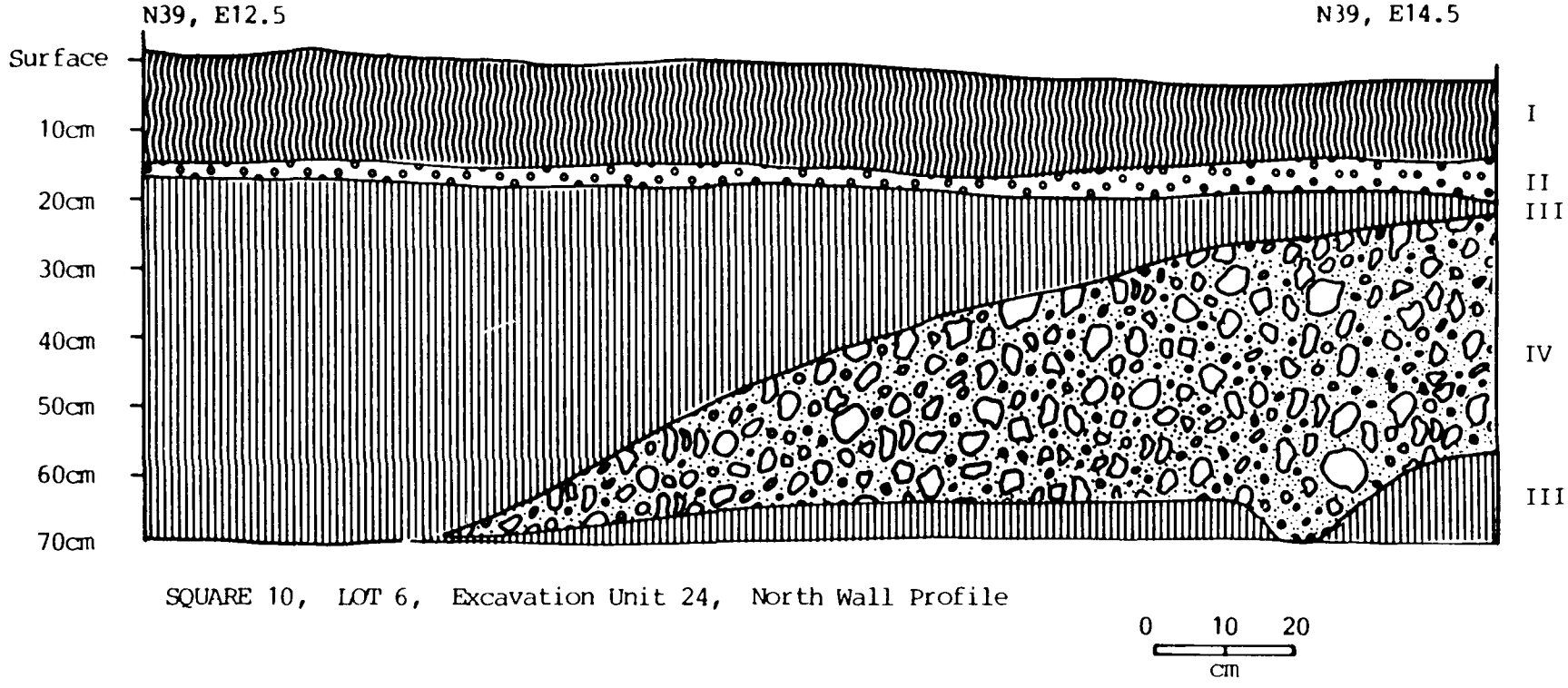


Figure 53. Stratigraphic profile of Excavation Unit 24, north wall, Square 10, Lot 6, Algiers Point Data Recovery Project.

Figure 53. Continued

KEY

Stratum I:	Silty clay overburden with charcoal, brick fragments
Stratum II:	Iron fragments
Stratum III:	Silty clay loam with brick fragments
Stratum IV:	Silty clay with gravel, shell, bone, iron, fragments, brick fragments, ferrous staining

encountered initially in T29. However, a thick lens of silty clay (Stratum IV) containing brick fragments, shell, bone, iron, ceramics, and glass was excavated and sampled in order to provide data on the age and functional association of the deposit.

Excavation Unit 25 was located adjacent to Trench 30 (see Figure 29), in order to provide additional samples of occupation refuse and to clarify the nature and extent of brick features encountered in T30. Grid coordinates for E25 are given in Table 11. The north wall profile of E25 is shown in Figure 54. Stratum I was a silty clay overbank deposit, which can also be seen in the stratigraphic profile of T30. A portion of this stratum was disturbed, and is shown as Stratum Ia in Figure 54. Stratum II was a silty clay containing cultural refuse including brick fragments, charcoal, glass, iron fragments, and crushed shell. Within Stratum II, a partially intact brick feature was encountered. Because it appeared to have been related to F132 in T30, this feature tentatively was designated F132A. A plan of E25 at 60 cm below surface, illustrates the condition of F132A. It consisted of a rectangular brick construction two courses in depth; its vertical and horizontal position indicated that it was a continuation of F132 in T30. However, while intact brick masonry was revealed in the eastern one-half of E25, post depositional activity destroyed much of the feature formerly located in the western one-half of E25, or the portion of the unit nearest to T30 (Figure 55). The position of F132 in T30, and of F132A in E25, provided additional corroboration for the hypothesis that this feature represented the remains of one of the three tenant houses formerly located in Lot 6.

As was the case for E24 and E25, Excavation Unit 26 also was placed adjacent to one of the trenches in Lot 6. E26 was located immediately to the east of T31 (Figure 29); grid coordinates for E26 are given in Table 11. The south wall profile of E26 is shown in Figure 56. Strata I and III consisted of silty clay overbank deposits. Between these two strata was a lens of iron fragments and refuse (Stratum II), originating from the Johnson Iron Works. Stratum IV was a silty clay deposit containing cultural refuse including ash, cinder, charcoal, mortar, ceramics, glass, bone. The floor plan of E26 at the base of Stratum IV (72 cm below surface) is shown in Figure 57. The plan illustrates brick rubble around which zones of ash and mortar were located. Stratum IV also was stained black, apparently due to the quantity of charcoal located in this stratum. Stratum V also was a cultural lens; it contained similar artifact classes to those found in Stratum IV. However, in Stratum V ceramic fragments were considerably larger; bone fragments were more numerous; and, the soil matrix lacked the black stain that occurred in Stratum IV. The floor plan of E26 at the base of Stratum V is shown in Figure 58. Here, intact brick masonry was exposed below fragmented bricks in Stratum IV. This feature clearly was associated with F133 in T31, and probably represents a pier or foundation associated with one of the three former tenant houses located on Lot 6. It is possible that Strata IV and V represent the same occupational event. Cultural refuse in Stratum V may represent habitation debris, while Stratum IV may indicate a

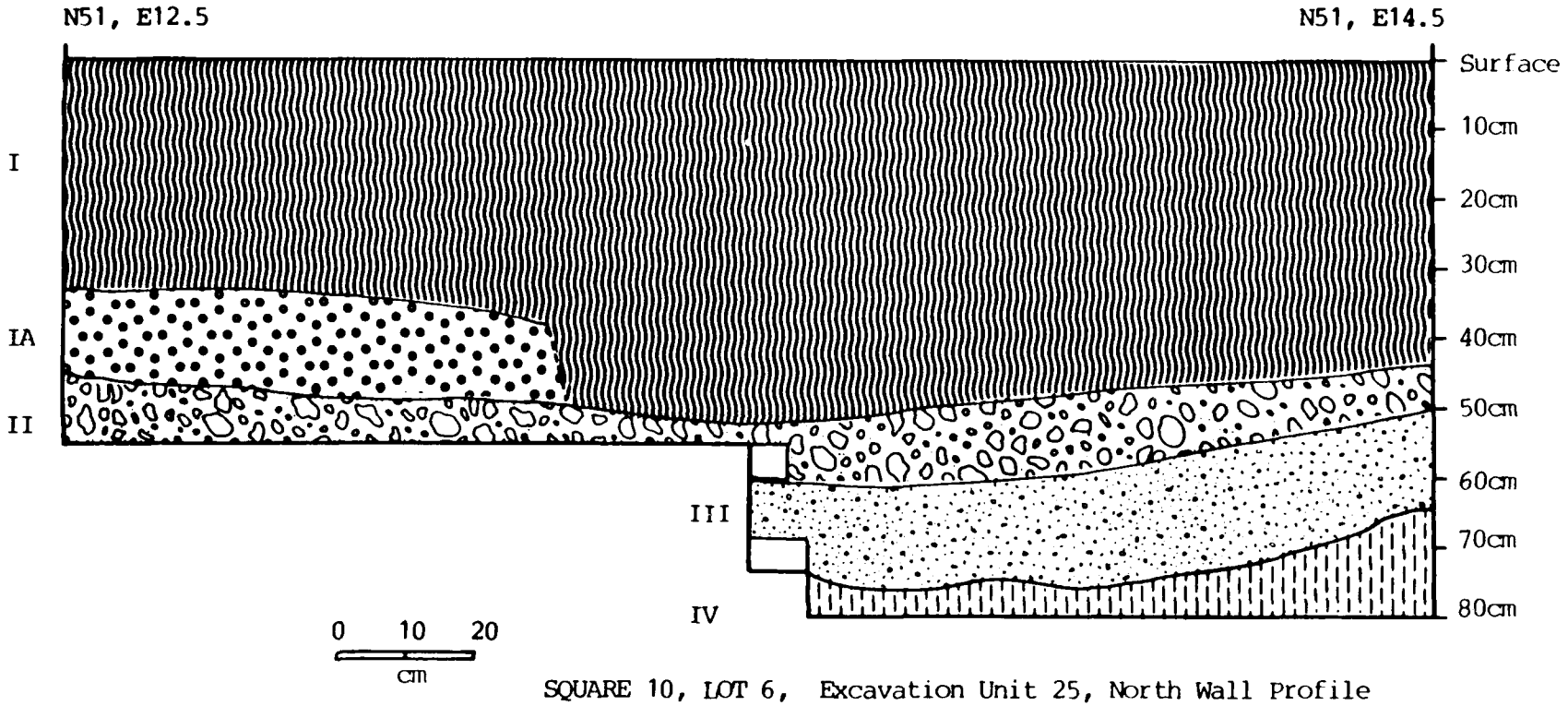


Figure 54. Stratigraphic profile of Excavation Unit 25, north wall, Square 10, Lot 6, Algiers Point Data Recovery Project.

Figure 54. Continued

KEY

Stratum I:	Silty clay overburden with scattered wood and charcoal
Stratum Ia:	Silty clay with iron fragments, wood, metal fragments
Stratum II::	Silty clay with brick fragments, charcoal, glass, iron fragments, crushed shell
Stratum III:	Silty clay with brick fragments, ceramics, glass, oyster shells, metal fragments, charcoal
Stratum IV:	Silty clay loam with scattered brick fragments in upper 5-10 centimeters

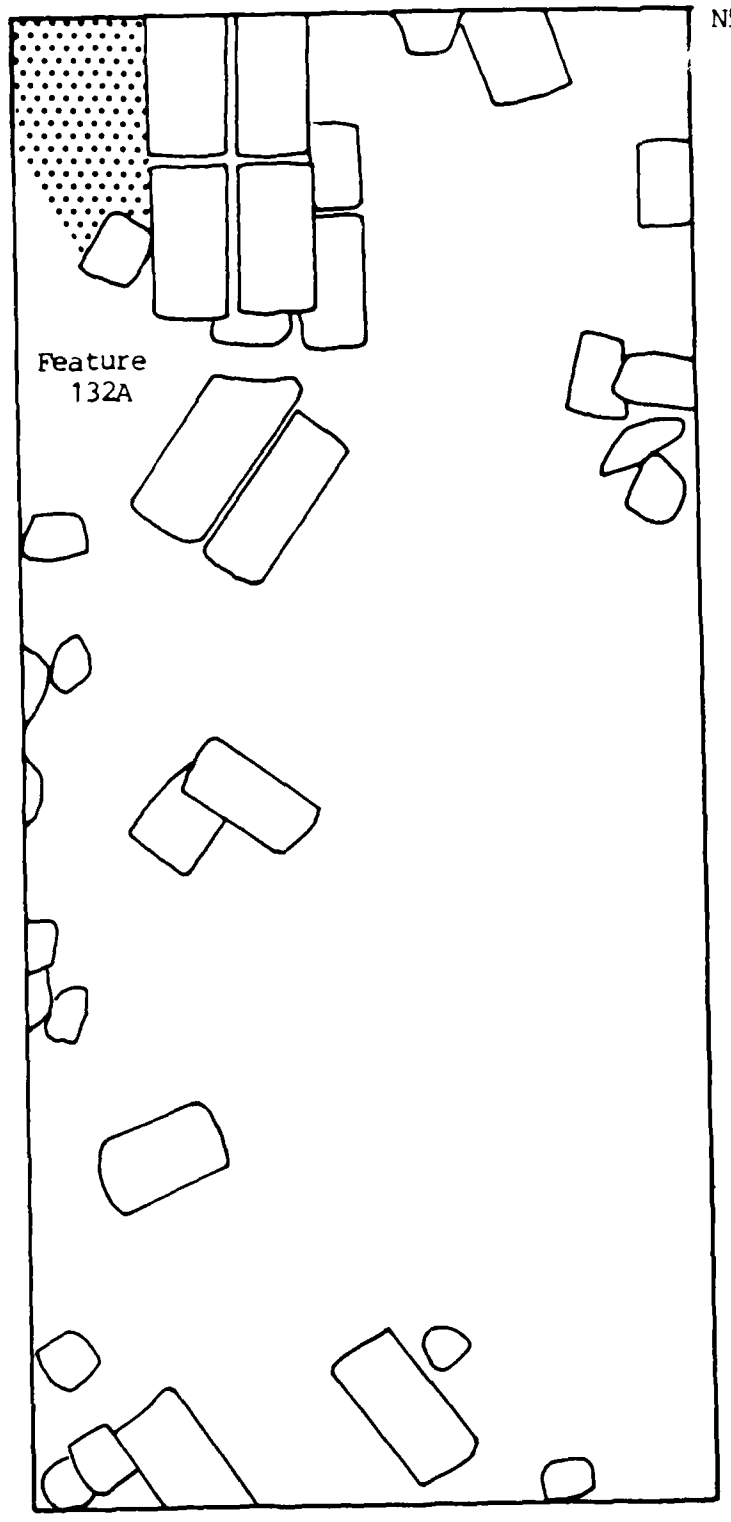


Figure 55. SQUARE 10, LOT 8
Excavation Unit 25
Plan View
at 60 cm below surface

0 10 20
cm

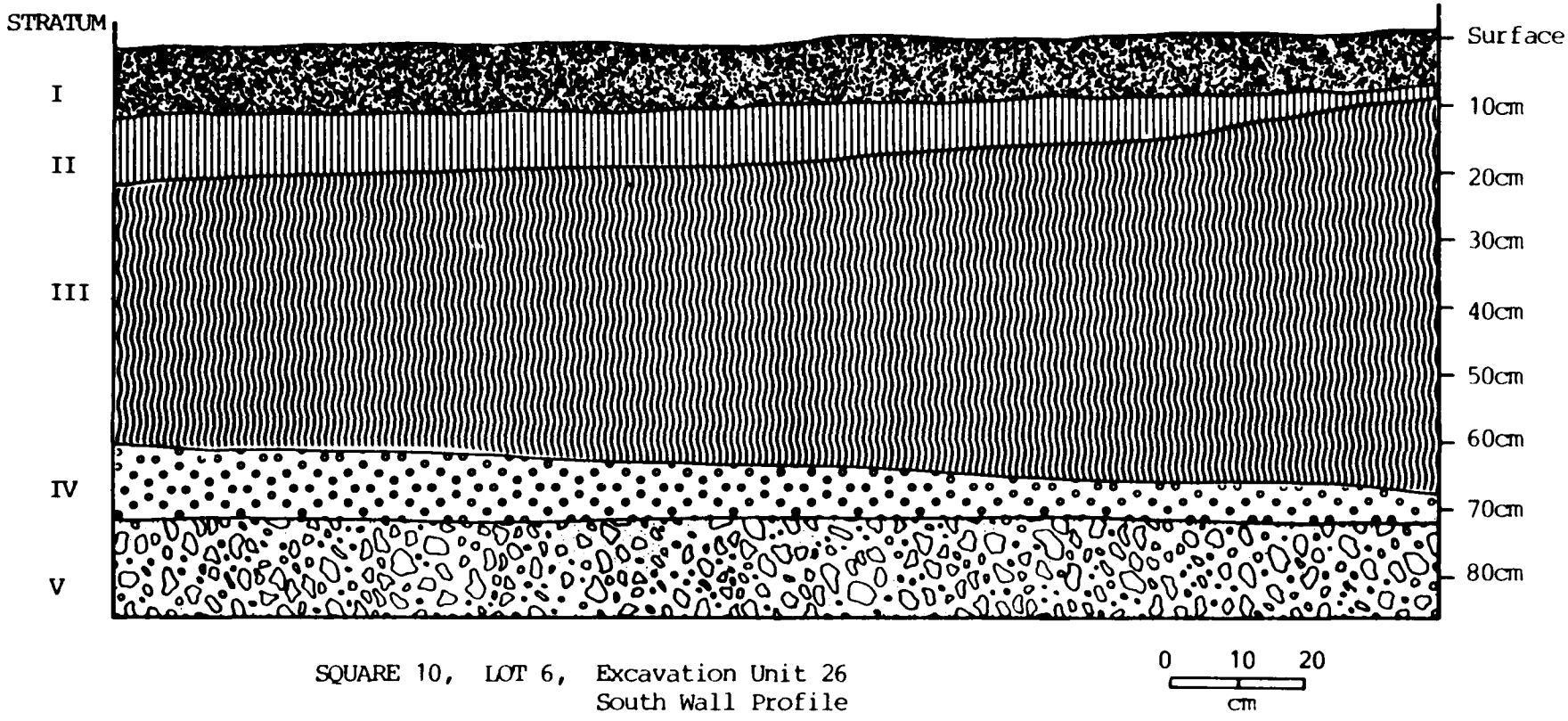


Figure 56. Stratigraphic profile of Excavation Unit 26, south wall, Square 10, Lot 6, Algiers Point Data Recovery Project.

Figure 56. Continued

KEY

Stratum I:	Silty loam overburden with rangia shells, concrete and fabric at surface
Stratum II:	Silty loam with ferrous staining, iron fragments
Stratum III:	Silty loam with brick fragments
Stratum IV:	Silty clay with ash, mortar, ceramics, glass
Stratum V:	Silty clay with brick fragments, ceramics, glass, iron fragments, bone, oyster shells

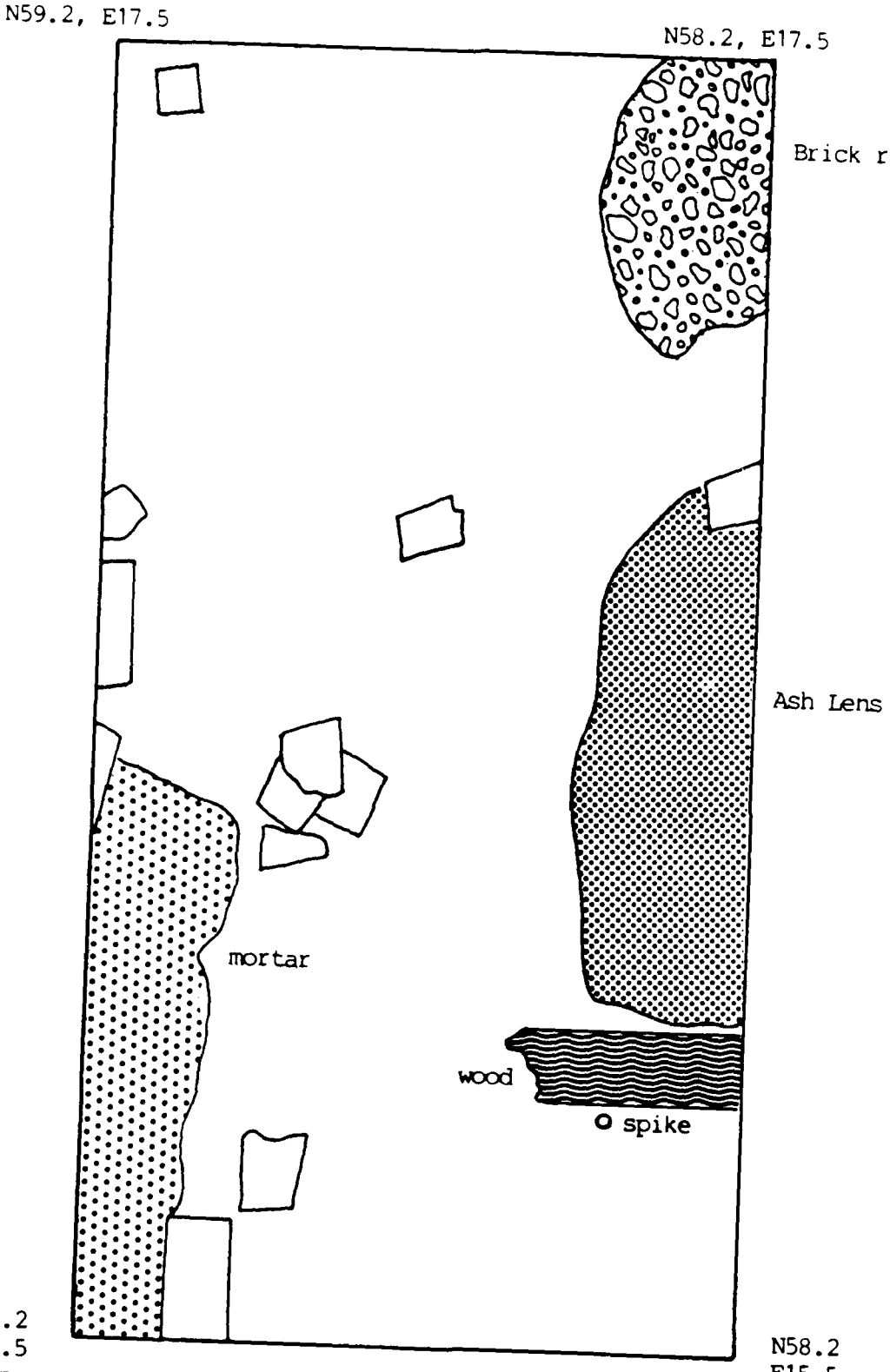
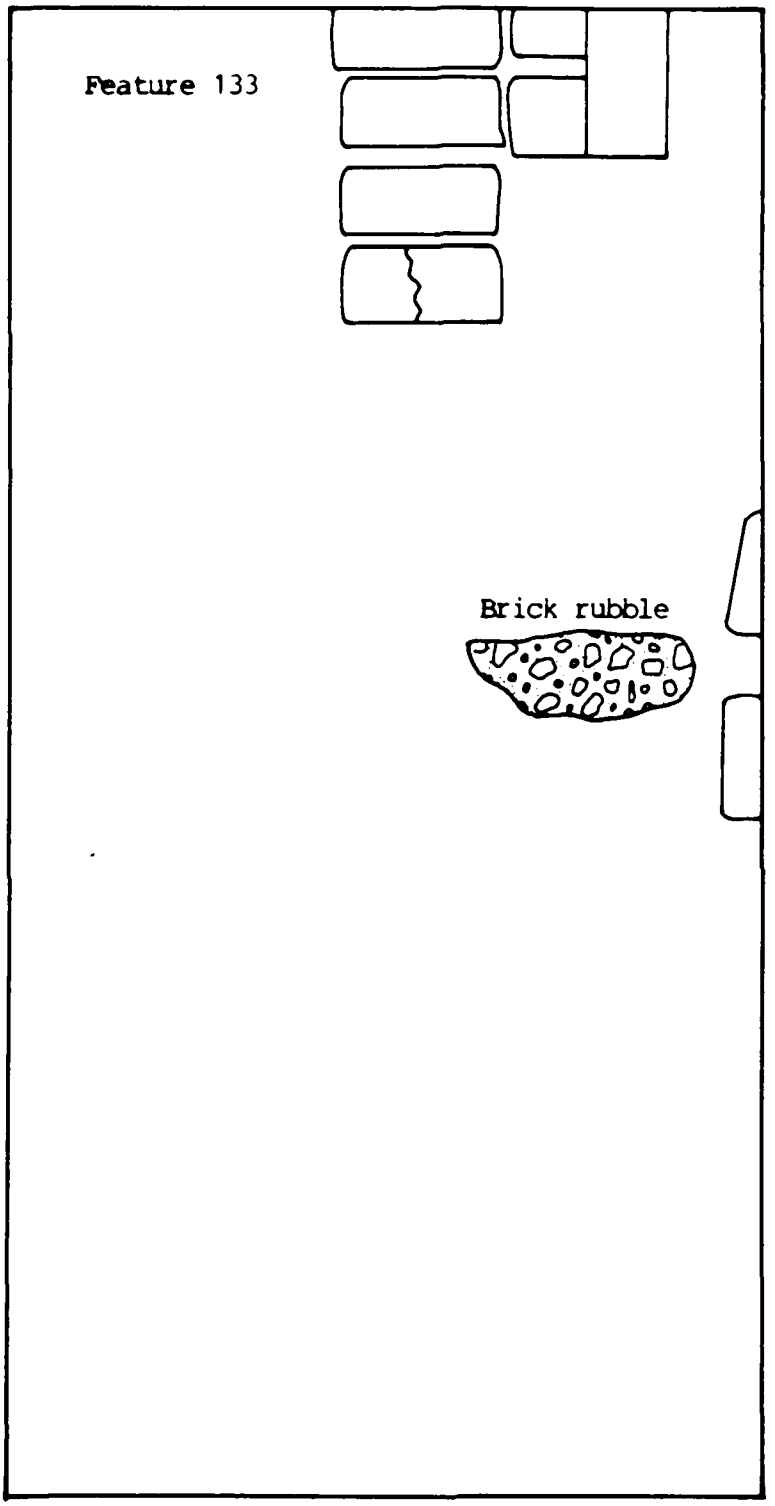


Figure 57. SQUARE 10, LOT 6
Excavation Unit 26
Plan View
at 72 cm below surface

N58.20, E15.5 N59.20, E15.5



N58.2
E17.5

N59.2
E17.5

0 10 20
cm

Figure 58. SQUARE 10, LOT 6
Excavation Unit 26
Plan View
at 95 cm below surface

final period of disturbance, including the removal of the tenant houses on Lot 6 just after the turn of the nineteenth century. This might account for the greater fragmentation of sherds; for the presence of charcoal and wood; and, for the partial destruction of brick support foundations in Stratum V.

As noted above, historic map data indicated the presence of three tenant houses on Lot 6, which were removed between 1896 and 1903. Several features were recovered in Lot 6, four of which appear to have derived from these tenant houses. Feature 131, a linear brick pier, and Feature 132, a brick pier, both occured in Trench 30 and were associated with one of the the tenent houses. Features 133 and 134, both brick piers located in T31, are associated with a second tenant house on the lot. Mean Ceramic Dates associated with these features range from 1865.4 - 1895.0 (Table 29; see Chapter 7), and are consistent with the historic map data. Two additional features, F129 and F130, an L-shaped and a linear brick pier, were recovered in T29. However, the archival histories and historic map evidence do not confirm the presence of former standing structures at this location. An MCD from T29 (Stratum IV) was calculated at 1858.1, dating somewhat earlier than those features clearly associated with the former tenant houses. As noted above, the occurrence of early dates from features, excavation units, and backhoe trenches which predate documented archival evidence for standing structures also occurred for Lot 8.

In Lots 6 and 8, a total of nine features were recovered; most of these consisted of brick piers, although a brick pavement also was recovered. All excavation units in Lots 6 and 8 are synopsized in Table 11; Features from these lots are defined in Table 12. Upon completion of excavations in Lots 6 and 8 of Square 10, the fieldwork phase of Algiers Point Data Recovery Project was concluded.

Summary

Archeological investigations at Algiers Point focused on Squares 21, 13, and 10. In each of these squares, structural remains and occupational refuse deposits were recovered that can be related in general terms to the historic occupations previously discussed.

Excavation in Square 21 revealed fifteen features and three refuse deposits. In E1, partially exposed brick foundations in primary context were found that cannot be assigned to a specific occupation due to the lack of viable archival information. Three refuse lenses also were sampled in E1. The most recent of these consisted of a highly oxidized ferrous zone deriving from the Johnson Iron Works boiler plate shop shown on the 1909 Sanborn map. This lens complements data recovered in Square 13, the "Church" lot, which also derive from the Johnson Iron Works occupation. Immediately below this oxidized zone, a secondary refuse lens resulting from trash disposal by area residents was found. The large sample of remains recovered there was mixed by depositional and by post depositional events. This was seen clearly in the laboratory, when it was found that sherds from

TABLE 12. Archeological Features Excavated in Square 10, Lots 6 & 8.

Feature Designation	Depth	Nature of Features	Condition	Probable Context	Grid Coordinates
F 126	0-40 cm	rail in concrete	good	primary	
F 127	0-28 cm	rectangular concrete slab	good	primary	
F 128	25-50 cm	rectangular brick pier	good	primary	N15.2-15.5, E4.5-5.5
F 129	27-52 cm	L-shaped brick pier	good	primary	N38.3-39.1, E14.5-15.3
F 130	46-54 cm	linear brick pier	partially disturbed	primary-secondary	N36.3-37.5, E14.9-15.5
F 131	44-54 cm	linear brick pier	good	primary	N48.5-49, E14.5-15.5
F 132	43-52 cm	brick pier	good	primary	N50.2-50.5, E14.5-15
F 133	59-67 cm	brick pier	good	primary	N58.5-58.6, E15.3-15.5
F 134	60-73 cm	brick pier	good	primary	N59.5-59.9, E14.5-14.7
F 135	30-39 cm	brick pavement	partially disturbed	primary-secondary	N24-25, E5.5-7.5
F 136	0-70 cm	brick wall	good	primary	N32.1-32.4, E00-10

different quadrants and depths could be reconstructed into complete or partially complete vessels. The deepest refuse deposit in E1 was stratigraphically distinct, having been overlain by a thin layer of silty clay. This lens presumably was associated with structural foundations in the area, since artifacts recovered, such as buttons, ceramics, and faunal remains, indicate residential occupation. Data from this deposit can be used in comparisons with other residential assemblages from Algiers Point and from elsewhere in the New Orleans area. Similarly, excavation Unit 3 exposed and sampled Features 9 and 10. Feature 9 consisted of wood planking located under a thick lens of silty clay, stratigraphically above Feature 10, an L- shaped brick foundation. A secondary refuse lens was associated with this feature. This refuse lens no doubt also derives from residential activities, although its structural association is unknown.

Features recovered from Square 13, the "Church" lot, consisted mainly of brick walls and of smaller brick foundations. When mapped, the smaller brick foundations outlined two structures that could be associated with the Guillaud/Mothe occupation of this lot. It is known that Mothe built a two story, slate roofed residential structure there during the late 1880s. Feature 45 was a double hearth foundation. Feature 16 and 50 were brick walls associated with the Johnson Iron Works occupation of this lot. Features 18, 23, 33, and 39 appear to represent foundations which supported machinery at the metal work shop and machinery warehouse shown on the 1909 Sanborn map of Square 13. These features are important because construction data recovered complement the oral history provided for machinery function by a local informant, Mr. James Comfort. The upper refuse lens that was uncovered during parking lot surface removal had a matrix that consisted of ash and cinders. This fits the location of the cinder floor shown on the 1909 Sanborn drawing of the metal work shop. A second refuse lens was located under a zone of silty clay. This lower lens probably derives from the Guillaud/Mothe occupation.

Features and samples from two refuse lenses in Square 13, Lot 13, yielded data from both ante and post bellum residential activities. The refuse lenses are separated stratigraphically by a silty clay stratum. Subsurface testing may have confirmed the hypothesis that two temporally separate residential structures stood on the lot. The later structure is shown on both the 1896 and 1909 Sanborn Insurance maps. The stratigraphic profile (Figure 27) of E16 shows two features separated by the same silty clay that separates the two refuse lenses. Fieldwork in Square 13, Lots 1 and 2, recovered features 119 - 125 and 137. These features included large concrete or brick foundations; small brick and concrete foundations; and, wooden beams. Due to their large size, they probably derive from the Southern Marine Work and Johnson Iron Works occupations of the lots. Refuse lenses in these lots were virtually destroyed by a construction sequence revealed in the Sanborn Insurance maps. Isolated bricks or brick scatters were seen in trench profiles, but these lacked significant context.

Features recovered in Square 10, Lot 8, probably derive from the Duvic occupation of this lot, with the exception of Feature 136. Feature 128 is a derrick footing that probably denotes the north or back side of the blacksmith shop shown on the 1896 Sanborn map. Feature 133 appears to be a brick pavement or floor from the Duvic occupation. A refuse lens in Lot 8 possibly reflects the disposal activities of John Sprada, owner of Lot 8 after Duvic's tenure ended. A lower refuse lens may define activities related to Duvic's blacksmithing concern.

In Square 10, Lot 6, Features 129 - 132 and 134 - 135 appear to derive from two of the three tenant residences listed as a correction on the 1903 Sanborn Insurance maps. The houses are relatively small, and their observed orientation on an east-west axis fits that shown on the Sanborn map.

The various historic archeological excavations at Algiers Point have provided data from a range of occupations varying from tenant dwellings to industrial machine shops. Structural remains vary similarly from small brick piers for cottages or shotgun houses to the massive concrete slabs of Johnson Iron Works. Throughout the area, historic middens also were found, containing faunal, ceramic, glass, metal, and other classes of remains, and representing a variety of chronological periods and developmental stages in Algiers Point history. Raw counts of excavated artifact classes are presented in Appendix 1; these demonstrate the magnitude of the collection, and indicate the level of effort expended in data recovery.

CHAPTER VI
LABORATORY ANALYSIS

Primarily nineteenth century artifacts were excavated from Algiers Point. Although archeological classification of eighteenth century ceramics is fairly coherent and well developed (Noel Hume 1970), there is no comprehensive typology of nineteenth century ceramics. South (1974) presented a taxonomy of nineteenth century ceramic types; however, South's taxonomy is not especially sensitive either to technological developments or to relationships between certain nineteenth century types. Miller (1980) suggests that classification of nineteenth century ceramics should be based on decorative type and on form. However, this method obscures or ignores both variability in paste and important chronological information. Recently, Worthy (1982) suggested that classification and interpretation of late nineteenth and early twentieth century ceramics should integrate technology, form, function and decoration (Worthy 1982:329). However, in collections with a high percentage of small sherds unidentifiable as to former function and form, this approach is not practical.

Because of the need for a comprehensive yet flexible formal classification of nineteenth and twentieth century Anglo American ceramics, the discussion following presents a formal classificatory description of the ceramic sample from Algiers Point. The approach used here is a paradigmatic classification (Dunnell 1971:84) that is the product of the combination of unweighted classes of paste, glaze, and of decorative type (Yakubik 1980b). This method provides more complete definition of ceramic types than now exists; it facilitates the handling of ambiguous and transitional ceramic types; and, it provides information concerning both chronology and social stratification. This approach has proven useful with collections from both rural and urban sites in South Louisiana (Goodwin and Yakubik 1982a; Goodwin, Yakubik and Goodwin 1983; Goodwin, Gendel and Yakubik 1983a; Goodwin, Yakubik and Gendel 1983; Yakubik 1983b). In the discussion following, ceramic artifacts have been divided into groups by paste. Glaze and decorative techniques then are examined for each paste group. Ceramic artifacts from Algiers Point are listed by provenience unit in Tables 13, 14, 15, 16 and 17.

"Jackfield" ware is a refined earthenware type that was produced in England between 1740 and 1780. The hard-fired body ranges in color from a dark red to almost black but most commonly it is purple to gray in color. The body of this type is engine-turned and thin, and at times it is decorated with impressed motifs. The glaze on "Jackfield" ware is deep black and lustrous. This type is easily recognized; it is called "Jackfield" after the Jackfield Pottery of Shropshire, where it was produced. However, the type was imitated widely in England (Noel Hume 1970:123) and in the United States. Therefore, assignment to this type group should be on a generic, rather than a specific basis (Yakubik 1983a). Most of the sherds from Algiers Point appear to derive from a single teapot that was

decorated with oil gilding.

It is interesting that "Jackfield' ware is a relatively rare occurrence in archeological contexts in Louisiana as opposed to the northeastern U.S. (Yakubik 1983a). Previous research has shown this type appearing in such widely different contexts as an early nineteenth century orphanage refuse pit (Goodwin and Yakubik 1982a), an early nineteenth century planter's kitchen (Goodwin, Yakubik and Goodwin 1983), a late eighteenth/early nineteenth century slave cabin (Goodwin, Yakubik and Gendel 1983), and in an early nineteenth century suburban house (Yakubik 1983b).

A cream colored earthenware ceramic body was perfected by Josiah Wedgwood and Thomas Whieldon in 1759. Creamware, a type of cream colored earthenware, was perfected by Wedgwood ca. 1762. This development contributed to England's increasing control of the world ceramic tableware market (Miller 1980). Creamware consists of a refined, thin, cream colored earthenware body with a clear lead glaze tinted with copper oxide. Creamware was popular through the end of the eighteenth century and into the first two decades of the nineteenth century. It was imported to the American colonies at least as early as the late 1760s.

Although several different decorative techniques, such as mocha, annular decoration and overglazed hand-painting, were applied to creamware, it frequently was left undecorated. Some of the creamware from Algiers Point had annular decoration, which consists of bright horizontal bands of colored slip, but the majority of creamware in the sample was undecorated.

By 1779, Wedgwood had developed pearlware from creamware. Although pearlware differs from creamware in the amount of flint in the paste (Noel Hume 1969:390; 1970:128), the bodies of pearlware and of creamware are virtually identical. The major distinction between these two types is their glazes (Noel Hume 1969:395). The pearlware glaze is tinted with cobalt oxide, and it pools blue in crevices. While the copper tinted glaze of creamware gives a yellowish appearance, cobalt has the effect of whitening pearlware. Like creamware, pearlware was popular through the first two decades of the nineteenth century.

Unlike creamware, pearlware usually was decorated. Annular and mocha decorations were common on pearlware bowls and mugs. The latter consists of brown, fern-like decorations on the vessel that were produced from a mixture of tobacco juice and urine (Noel Hume 1970:131). Shell-edged pearlware, or pearlware plates decorated with feathery inward brush strokes in blue or green, also were popular. Zones of swirled colored slips, usually combined with annular decoration, produced a decoration known as "finger-painting." Hand-painting, in both monochrome and polychrome colors, also was popular. Earlier examples of this latter type (ca. 1795-1815) utilized softer pastels; later examples (ca. 1815-1835) utilized directly stenciled floral patterns and bright colors (Noel Hume 1970:129). Another common form of decoration was the application of bright colors to a vessel either with a sponge or spattered on with a brush. Occasionally this was combined with

polychrome hand-painting.

Most frequently, pearlware received transfer-printed decoration, usually in blue. Earlier examples of blue transfer-printed pearlware have a grey cast, while later examples utilize a blue with a purple tone. The very latest examples, and especially the blue transfer printing found on white colored earthenwares (see below), used lighter "washed out" looking shades. A variation on transfer-printed decoration is deliberately blurred by a chlorinated vapor introduced into the kiln (Ray 1974:69). This decoration only is found on the latest pearlwares; it was developed accidentally by the Wedgwood factory ca. 1830, and it is more commonly found on whiteware/ironstone until ca. 1880 (Nicholson 1979:67). Often, transfer printed pearlware sherds can be identified by rim pattern even if no maker's mark is recovered. Although plate patterns were widely copied, rim patterns for the most part are diagnostic (Camehl 1916). All of the above types were represented in the Algiers Point collections.

White colored earthenware resulted from the introduction of small amounts of cobalt to the ceramic paste, a development that had occurred by the early nineteenth century. Over time, the body of these ceramic vessels became thicker and coarser, and the net result of these changes distinguishes white colored earthenware from cream colored earthenware. During the first quarter of the nineteenth century, this white colored earthenware often was covered with the cobalt-tinted glaze typical of pearlware (Sussman 1977:105-106). Also found during this time period are cream colored earthenwares with very lightly tinted pearlware glazes, and white colored earthenwares with a copper tinted creamware glaze. Decorative techniques and motifs typical of pearlware were used on these transitional types. Rims embossed with garlands, leaf-like motifs, beads, and a variety of other patterns and painted over in green or blue also are common after 1800. Sherds of these transitional types were recovered from Algiers Point.

The use of copper and cobalt additives in glazes gradually was reduced, and at the end of the first quarter of the nineteenth century a ceramic type with a white colored earthenware body and with a transparent alkaline glaze appeared. This type commonly is called whiteware. A similar ceramic type developed in the mid-nineteenth century in England and in the United States has been called ironstone, stone china, or granite ware. It also has a refined white colored earthenware body (this should not be confused with Mason's patented Ironstone China of 1813). While Worthy (1982:335-337) classifies ironstone as a white stoneware, she also states that it is "almost vitreous," which precludes it being a true stoneware since stonewares by definition are vitrified. Worthy (1982) is correct in stating that late ironstones are easily distinguishable from whitewares. However, distinctions at mid-nineteenth century are less clear. Although some practitioners (Noel Hume 1970:130; South 1977:211) distinguish ironstone from whiteware, and while it seems likely that there are sufficient differences between these types in terms of body composition, body

permeability, body thickness, decoration, and color to warrant their segregation, it also is clear that these differences are poorly understood at the present time. As with pearlware and whiteware, the differences between whiteware and ironstone form a continuum rather than constituting distinct types after the time of ironstone's introduction. There is little agreement in the literature on the criteria that distinguish these types. Other authors have used a unicameral classification for them (South 1974; Nicholson 1979; Lees 1980). Barber (1902:19) states that the ceramic formula of ironstone is similar to that used in all white wares, e.g., flint, feldspar, kaolin and ball clay. Therefore, the single classificatory unit of whiteware/ironstone was used in this study for the purpose of classifying intermediate and/or indeterminate types.

Whiteware/ironstone has continued in production throughout the twentieth century. Although it frequently was undecorated, as in the case of pearlware the most common decorative technique was transfer-printing. Scenic designs, both natural and romanticized, were popular until the 1850s, when undecorated ironstone came into fashion. During the later nineteenth century, floral designs were the most common transfer-printed motif on both whiteware and ironstone (Wakefield 1970:35). Flow Blue was also a popular decorative technique, as was hand-painted decoration, or hand-painting utilized in combination with transfer printing. Embossed blue and green and shell-edged rims are common until ca. 1830, and are represented in this sample. Other decorative techniques that appear on whiteware/ironstone include: annular decoration; hand-painted bands on the rims of plates; overglaze decalcomania; sponged decoration; stenciled decoration; and, stamped decoration. Decalcomania did not come into general use until ca. 1900, while the other aforementioned techniques were utilized throughout the nineteenth century. Examples of all of the above are represented in the Algiers Point collection.

Ironstone, as stated above, should not be confused with Mason's patented Ironstone, which was developed in 1813. Rather, the ironstone under consideration here was developed in England ca. 1850 and it was produced at a slightly later date in the United States. Although it often is very similar in appearance to whiteware, it is helpful to isolate as many true ironstone sherds as possible. Ironstone is defined as having a hard, white, often thick ceramic body. It is not completely vitrified, but it is more vitrified than whiteware. The fractures are even and smooth. The surface of the vessels are hard and smooth, usually covered with a bluish-grey tinted glaze which usually is opaque-looking in appearance.

The vast majority of ironstone from Algiers Point was undecorated, or decorated with molded relief patterns. Late nineteenth and twentieth century ironstone tended to be undecorated or simply molded into oblong patterns, raised barley or wheat sheaf motifs and, infrequently, raised flowers. Undecorated ironstone was meant for durable tableware use, and remained in production until ca. 1940. Decorative techniques found on the ironstone from the Algiers Point collection

included transfer-printing, flow blue, hand-painting, transfer-printing and hand-painting used in combination, gilding, banding, stenciling and decalcomania. An unusual type of ironstone found in the Algiers Point collection had pale blue sprigged decoration. This decorative type was known as Blue Chelsea, and it appeared on ironstone teaware ca. 1850 - 1880.

Red colored earthenware has a distinctive paste color ranging from a deep red-brown to orange and to pink, due to the presence of iron compounds in the clay. Color varies with the amount of impurities in the clay and with the firing temperature. Fired at low temperatures, the body is usually light and porous. Complete vitrification cannot be achieved with pure earthenware clays. As a result, red colored earthenware tends to be more fragile than stonewares or porcelains (Rhodes 1973:47).

Because of the ready availability of red-colored earthenware clays in most areas and due to its ability to be fired at low temperatures (earthenware becomes hardfired between about 950-1100 degrees C, viz Rhodes 1973:22), redware for utilitarian use was produced commercially in many regions of the United States from the mid-eighteenth century onwards. Consequently, this type is relatively undiagnostic for dating purposes. Early in the colonization of Louisiana, it was noticed that the local clays were suitable for pottery manufacture. Bricks were manufactured on the Tchoupitoulas Coast of present day Jefferson Parish as early as the 1720s, and it is likely that redware ceramics were manufactured elsewhere in Louisiana at a relatively early date, as well. These coarse, utilitarian, locally-produced, wheel-thrown vessels may have been the ceramics that were most readily available to the early colonists in the period prior to the wholesale importation of mass-produced British ceramics. Seriation of the ceramic subassemblage from Elmwood Plantation supports this hypothesis (Goodwin, Yakubik and Goodwin 1984). Redware continued to be produced throughout the nineteenth century for utilitarian purposes.

Since the ceramic is porous, it usually received a glaze on one or both surfaces to render it impermeable to liquids. Unglazed redware also is common, though, and specimens of this kned were recovered from Algiers Point. Redware often was glazed with a clear lead and later with an alkaline glaze on one or both surfaces. Colored glazes, such as a lead glaze tinted with manganese oxide to provide a brown to dark purple opaque glaze, also were common. Slip glazes, or glazes composed almost entirely of clay, occasionally are found on redwares. Albany slips, in particular, were utilized on redware in the South from 1860 to 1900 (Ramsey 1947:138). Because these glazes need higher firing temperatures in order to fuse than low firing redware clays can tolerate before melting, such glazes always are found on red colored earthenwares which have been combined with more refractory clays such as stoneware or fire clay. Frequently, redwares were covered with an engobe (layer of slip used to change the surface color of the ceramic body) and then covered with a clear glaze. Redwares also were found with an engobe, or slip, as the only surface treatment. Colored engobes

were obtained by the addition of metal oxides (Rhodes 1973:252). Colored slips trailed onto the ceramic body constituted the most common form of decoration on redware. Such trailed slip decoration usually was covered with a clear lead glaze. Examples of all of the above decorative modes are represented in the Algiers Point Collection.

Several crocks of an unusual redware type also were recovered from Square 21 at Algiers Point. Most of these a pink (red) earthenware body, and had an albany slip interior. The exterior was covered with a salt glaze, typically found on stoneware (see below). Salt glazed redware was produced in the South between 1825-1850 (Ramsey 1947:128). The addition of the Albany slip interior to this type was utilized primarily in Ohio between 1850 and 1880 (Ramsey 1947:131).

Refined red earthenwares were popular during the late eighteenth century. These ceramic bodies are much finer, thinner, more compact, and free from inclusions than the coarse utilitarian redwares previously discussed. Refined redwares frequently exhibit engine-turned decoration and a clear lead glaze. Another type of refined redware is "Astbury ware," a fine, turned red earthenware with a lead glaze that has a red brown surface appearance. White kaolin pipe clay was used for sprigged decoration on this type (Noel Hume 1970: 122-123). Since it was widely copied, "Astbury," named after John Astbury, one of its manufacturers, is used as a generic term.

The refined redware sherds in the Algiers Point sample did not derive from such easily recognizable types. They also were extremely small sherds. Several of these have what appears to be annular decoration, typically found on mugs, bowls, and jugs of cream colored, white colored, and yellow colored earthenware. A few sherds of refined redware are covered with a white pipe clay slip on the interior. The exteriors are covered partially with blue, yellow, or white slips; the remainder shows a red body under a lead glaze. Another unusual sherd of refined redware has blue, brown, and green slips applied mosaic-like over a white pipe clay engobe. The interior also is covered with a white engobe. However, the paste is the same hard fired, compact refined redware as those discussed above. Similar sherds of refined redware with unusual decoration were recovered from the site of the Rodriguez house in the Chalmette Unit of Jean Lafitte National Historic Park (Yakubik 1983b). It is possible that these ceramics may have been produced in England during the late eighteenth century when such types were popular. Alternatively, the presence of these unusual decorative modes on sherds from two sites in the New Orleans area may indicate local manufacture by a very skillful potter. The remainder of the refined redware sherds from Algiers Point were undecorated, or they exhibited molded relief decoration or white slipped interiors.

Yellow colored earthenware is a coarse American ceramic body type. In fact, the body consists of stoneware and not earthenware clays, but it is considered an earthenware since it is not fired to vitrification. The bodies range from low-fired pieces which are soft and quite porous, to high-fired, almost

vitrified pieces. The body color ranges from buff to brown-yellow, varying with the type and amounts of impurities in the clays and with firing temperature.

Surface treatments on yellow colored earthenware, varied with function. Yeloow colored earthenware was molded into thick, heavy utilitarian shapes, such as mixing bowls. It was covered with a clear glaze. This type commonly is called yellowware. Yellowware in general either was undecorated or it was decorated with annular or mocha decoration. Annular decoration consists of multi-colored bands of slip that are applied to the vessel by engine turning. On yellowware, these bands usually are blue or white. One small sherd of annular yellowware from Algiers Point had a zone of tiny, pebble-like inclusions pressed into the vessel surface between two annular bands. Mocha decoration, usually found in conjunction with annular decoration, also is found as the sole decoration on yellowware vessels. Yellowware was produced between 1830 and 1900 (Ramsey 1947:148); the mocha and annular variants were manufactured from 1840 to 1900.

Yellow colored earthenware also was covered by a dense, matte brown to black slip glaze known as an Albany slip. Also known as "brownware," this type was produced between 1830 to 1900 (Ramsey 1947:144). This variant most frequently was used for straight-sided crocks and storage jars. It generally was wheel thrown. Occasionally, brownware received a light salt glaze; this often resulted from firing in the same kiln as salt glazed stonewares (see below). Salt glazed brownware was manufactured in the South between 1860-1900. Brownware also is found covered with brown to beige engobes and a clear glaze; it also was left unglazed. The latter type was produced between 1840 and 1875 (Ramsey 1947:144).

An opaque, mottled brown glaze produced by the inclusion of manganese oxide in the glaze also was found on yellow colored earthenware sherds. This type, known as rockinghamware, was produced between 1830-1900, and it generally was molded into tableware or decorative pieces (Ramsey 1947:147). The final variant of yellow colored earthenware was late spatterware. Also known as "late sponge," it was produced at the very end of the nineteenth century and during the early twentieth century. It was used for utilitarian pieces. Late spatter consisted of blue sponged decoration on an opaque white ground or an opaque light blue ground (Ray 1974:114). Both of these types were recovered from Algiers Point.

Cream colored ware, or C.C. ware (Ramsey 1947), is a nineteenth century American type which was an improvement on yellowware. Like the latter, it had a coarse paste, but the body was a lighter cream or buff color. C.C. ware always was undecorated and covered with an alkaline glaze. Close to yellowware in composition and appearance, it was utilized for similar utilitarian purposes. The majority of C.C. ware sherds from the Algiers Point collections came from a single vessel. C.C. ware should not be confused with cream colored earthenware or with creamware.

A similar coarse, cream to buff colored earthenware body

covered with brightly colored opaque or semi-transparent glazes is known as majolica, or English majolica. Introduced by Minton of Stoke-on-Trent at the "Great Exhibition" in 1851, it later was manufactured by Wedgwood and by George Jones and Sons potteries in England, as well as at a number of American potteries. The glazes generally obscured the coarse ceramic body, which generally was molded into fanciful shapes. Variants of English majolica include "Clifton" and "Avalon" wares which were introduced by the Chesapeake Pottery Company of Baltimore in 1882. The bodies of these were ivory colored and had molded relief decoration of fruit, ivy, and flowers. These relief areas alone were covered with colored glazes. Sherds of a single vase of this ware type were recovered from Square 21 at Algiers Point.

Stoneware bodies range in color from a white-gray or buff to deep gray or brown, depending upon the type and quantity of impurities in the clay and on the firing temperature. Fired between 1200-1300 degrees, stoneware is smooth and stoney in appearance (Rhodes 1973:22). Stoneware first was manufactured commercially in the United States ca. 1775; after 1800, domestically-produced stoneware became very popular for utilitarian use. American stoneware generally was wheel-thrown into thick and heavy utilitarian shapes. The most common and the most attractive surface treatment of stoneware is salt glazing. Salt glazing is accomplished by placing the raw ceramic body in the kiln, and raising the kiln temperature until the clay matures, at which time salt is placed in the kiln firebox. The salt vaporizes and deposits on the ware (Rhodes 1973:285). The resulting glaze is thin and has an "orange peel-like" texture. Most clays can be salt glazed successfully; as noted previously, salt glaze occasionally is found on brownwares and on redwares. When firing was undertaken at very low temperatures, borax was added to the salt, reducing the "orange peel" texture (Rhodes 1973:286). Salt glazed stoneware frequently was undecorated, or decorated with underglaze blue hand painting utilizing cobalt oxide. Since the salt vapors rarely reach the interior of the vessel, an Albany slip, developed ca. 1810, frequently was utilized on the interior of American made stonewares. Although other slip glazes were utilized for this purpose, the combination of salt glaze with an Albany slip is most common on nineteenth century stoneware and particularly on the gray varieties.

Clear alkaline glazes are found on stoneware, both with and without the prior application of an engobe. Often an engobe (slip) was applied before glazing in order to change the surface body color. These engobes sometimes were colored with a metal oxide. Stonewares also are found covered entirely with slip glazes, since the high firing temperatures of stoneware clays easily withstand the temperatures necessary for slip glazes. Since utilitarian stonewares, like utilitarian redwares, often were produced by relatively small local potteries, a great deal of variation is found in these are types.

A final type of stoneware comprises stoneware ale bottles. These have buff-colored body, with a yellow glaze that extends

from the lip to the bottle shoulder. These were produced during the second half of the nineteenth century.

"Porcelaneous stoneware" as a classificatory unit recently was introduced by Worthy (1982). This terminology is particularly descriptive of a type of ware that combines the traits of both porcelain and stoneware. Historically, this type has been known both as "semi-porcelain" and as "hotel ware." It is heavy, white, opaque, and completely vitrified. It contains both kaolin and ball clay, and fires between 1200-1400 degrees (Worthy 1982:337). This type, developed in the United States after 1880 for table use, commonly was used in restaurants and for other institutional purposes because of its durability. A variety of decorations were applied to porcelaneous stoneware; however, the ware most frequently was left undecorated or it was decorated only with a single, monochrome band on the rim. Porcelaneous stoneware is still in use today.

Hard paste porcelain and soft paste porcelain will be discussed together because of the frequent confusion between the two pastes. Hard paste porcelain first was produced by the Chinese in the eighth century,and over time Oriental porcelain came into such great demand that by the eighteenth century Chinese potters were producing porcelain solely for export. Canton porcelain, exported to the United States in large quantities during the first three decades of the nineteenth century, has a green-gray surface appearance, with sloppily executed blue handpainted designs.

As a result of many Western attempts to copy the Oriental ware, soft paste porcelain was developed. The lack of technical expertise and of sufficiently plastic kaolin sources hindered production of hard paste porcelains in England and France during the eighteenth century. Soft paste differed from hard paste porcelain in the use of a number of fluxing agents, such as frit (ground glass), which lowered the firing temperature of the clay. In 1800, Joseph Spode formulated a soft paste porcelain from kaolin and bone ash. Still produced today, it is commonly referred to as bone china. Soft paste ranges in color from white to pale buff. The body is completely vitrified, but the paste is somewhat granular in texture. In cross section, there is a clear division between paste and the glaze. It is often less translucent than hard paste. Soft paste porcelain was recovered from Algiers Point; the majority of it was decorated with blue sprigged, or Blue Chelsea decoration. These sherds had the pale lavender blue color typical of Blue Chelsea teaware produced ca. 1830-1850.

In 1709, a German at Dresden (Meissen) named Bottger produced the first western hard paste porcelain (Wynter 1971:33), and several German factories produced true hard paste porcelains during the eighteenth century (Miller and Stone 1970:90). A few English and French potteries were producing hard paste porcelain between 1768-1770 (Wynter 1971:170-174), and several Parisian factories began producing hard paste during the same time period (Wynter 1971:110-115). Many French and English factories, such as Limoges and Sevres in France, and W. T. Copeland and Sons, and Minton, both at Stoke-on-Trent in

England (Kovel and Kovel 1975:171-178), acquired the expertise to produce true hard paste porcelains during the nineteenth century. The French potteries, in particular, exported large quantities of porcelain to the American market during the second half of the nineteenth century. The popularity of French porcelains in America was largely the result of the efforts of the Haviland family, and their factory at Limoges produced porcelain specifically for the American market (Ray 1974:86-87; 118-120). Relatively inexpensive undecorated porcelains also were manufactured in France for the American table; these provided competition for English and American undecorated ironstones. The first commercially successful hard paste porcelains made in the United States were not produced until ca. 1880 (Ramsey 1947:156).

Hard paste porcelain is very white, vitrified, and translucent. Made from kaolin and petunse (feldspar - potassium aluminum silicate), it is fired at a high temperature (1300-1450 degrees) and approaches glass in composition. The hard paste porcelain body has a tendency to fuse with the transparent feldspathic glaze due to the high firing temperature. Fractures are smooth and glass-like, unlike fractures of soft paste porcelains. Barber (1902:20) suggests that distinctions between American manufactured hard and soft paste porcelains may be "arbitrary" and the two form a continuum "since the degrees of differences are often so slight that it is impossible to determine where soft paste porcelain commences and hard paste ends."

Decoration on porcelain sherds from the Algiers Point collection includes transfer-printing, hand-painting, decalcomania, and the application of gilt and luster. Most decoration was applied after firing, since few metal oxides other than cobalt (blue) can withstand the high firing temperatures necessary for porcelain clays. Consequently, the majority of decorations on hard paste porcelain are applied overglaze. However, most of the porcelain from Algiers Point was undecorated.

Hard paste porcelain also occasionally was left unglazed. This type was called "parian." It imitated marble, and was used most frequently for decorative figurines and vases. Parian was popular during the second half of the nineteenth century. The various patterns were widely copied by different American potteries. Thus, they are difficult to trace.

A total of 8,495 ceramic sherds were present in the Algiers Point collection. Of these, only 94 bore identifiable markers' marks. The vast majority of these marks were printed or impressed on ironstone. Despite the rapid growth of the U.S. ceramic industry during the late nineteenth century, the majority (63.8 percent) of the marked ceramics from Algiers Point were imported from England. Thirty sherds with makers' marks were manufactured in the United States. Of these, twenty-four were made in Ohio, and the other six came from Illinois, New Jersey and Pennsylvania.

In addition to these pieces, several other marked pieces deserve mention. The first of these is a small white

earthenware jar marked "E. Roussel, Perfumer. 114 Chestnut St. Philad. - 159 Broadway N. York." This jar undoubtedly held solid perfume. Like most of the other glass perfume/cosmetic bottles from Algiers Point, this jar was found in Square 13, lot 13. Evidently the widow Shorey, or one of her daughters, frequently used cosmetics that were imported both from the northeastern United States and from France.

It was hypothesized previously that many of the utilitarian redwares and stonewares recovered from Algiers Point were manufactured locally. In Square 21, several sherds of gray salt glazed stoneware bearing Algiers Point street addresses were found. The lettering is stenciled underglaze in black; thus, it was stenciled prior to the finishing of the piece. This suggests that a local pottery made stoneware to order for local merchants. The most complete of these reads:

Groceries, Wines and L(iquors)
314-316 Morgan St.
Algiers, La.

Tableware also apparently was manufactured in England for specific New Orleans dealers. This was indicated by a number of transfer-printed transitional pearlware/white colored earthenware types with advertising copy. Two plates, in an identical black transfer-print pattern, were made for the firm of "Hill and Henderson" of New Orleans. Hill apparently left the firm, for a later red transfer-printed plate bears the following inscription:

Henderson and Gaines
Importers
Canal St.
New Orleans

The inscription is enclosed in a cartouche, as is the pattern name "(_____) of Montrose". This was one of Scott's illustrations, as was the pattern on the black transfer-printed plates. Both the red and the black transfer-printed plates have the same rim pattern; they were manufactured by the Longport (Staffordshire) firm of Davenport. A blue transfer-printed casserole lid in the "Chian" pattern also was manufactured by Davenport for Henderson and Gaines.

Another pattern should be mentioned only because of its apparent popularity in Louisiana. Two sherds from Algiers Point were inscribed:

The Residence
of the late
RICHARD JORDAN,
NEW JERSEY

One of these sherds is a blue transfer-printed plate; the other appears to be part of a red transfer-printed serving piece, possibly a tureen. The latter provides a better idea of the

former appearance of this design. On it, the pattern consists of a cottage surrounded by a fence and gardens. On the road leading from the house, a stout gentleman dressed in eighteenth century garb is depicted. Both of these pieces were recovered from Square 21. A blue transfer-printed platter bearing the same pattern was found at 16PC33, Lakeland Plantation, Pointe Coupee Parish (Goodwin, Gendel, and Yakubik, 1983). These pieces bear the monogram "J.H. & Co.," which undoubtedly is that of Joseph Heath of Tunstall (Staffordshire), who manufactured printed earthenwares during the second quarter of the nineteenth century.

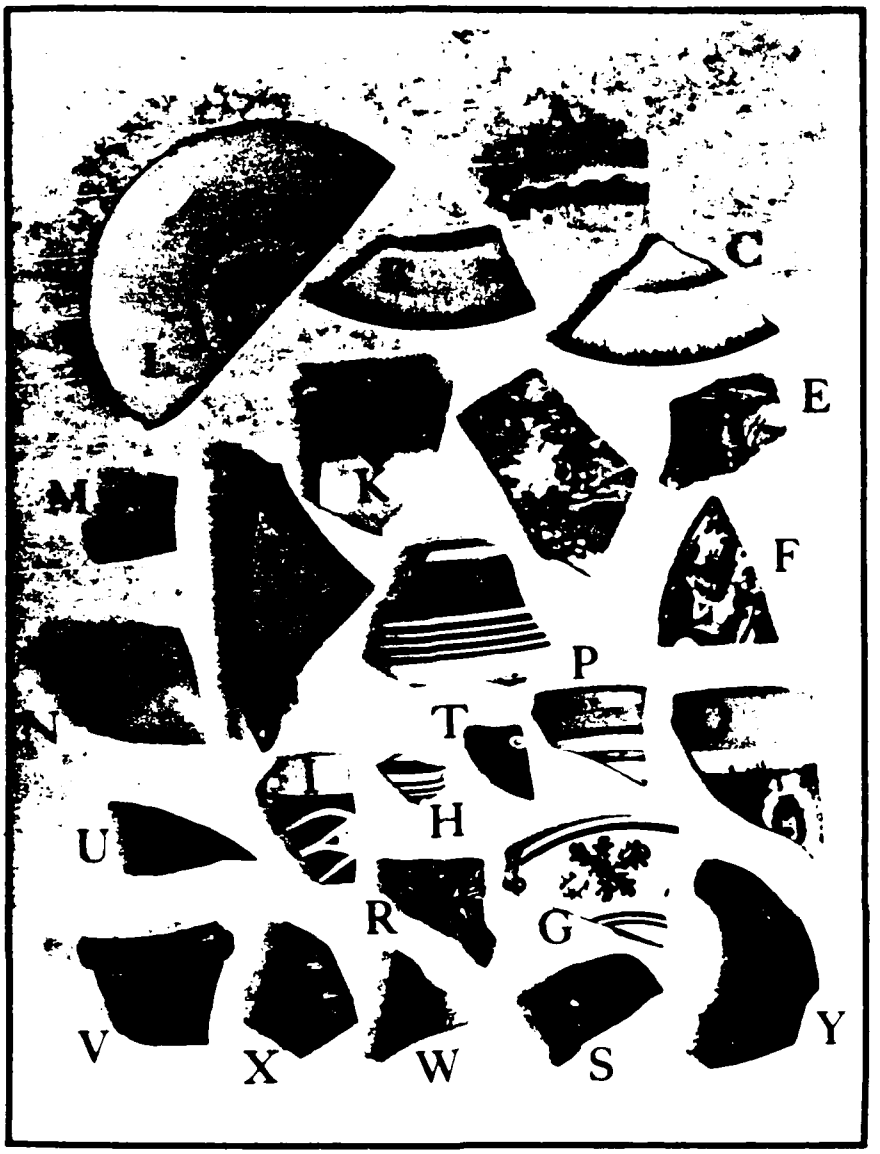
The ceramic collection from Algiers Point, and particularly from the area of the Square 21 midden, contained a large number of vessels that at least partially could be reconstructed. Examination of vessel form revealed a number of trends in dinnerware shapes.

The most common form for pearlware dinnerware was the soup plate. These dishes were versatile; they could be utilized for both roast meats and for more liquid meals such as soups and stews. These soup plates averaged approximately 9 inches in diameter. Actual dinner plates in pearlware were virtually non-existent in the Algiers Point collection. However, transitional pearlware\-white colored earthenware types often had the form of a dinner plate. Pearlware from Algiers Point also included bowls. The most common bowl was about 2-1/2 to 3 inches deep and approximately 6 inches in diameter. Unlike soup plates, these bowls had no rim, but angled sharply inward toward the base, which consisted of a rounded or rolled foot. Similarly, several pearlware tea cups and tea bowls took this shape; these were 1-3/4 to 4 inches deep, and 2-3/4 to 3 inches in diameter.

As mentioned before, transitional pearlware/white colored earthenware types were found in the shape of dinn plates, although the soup plate and bowl forms also continued in use on whitewares. Ironstone serving bowls were rare are Algiers Point. Large, heavy serving bowls were found in ironstone; these were 7-1/2 to 8 inches in diameter, and had a depth of about 3 inches. The function of the single serving bowl seems to have been entirely replaced by the rimmed soup plate, which were wider (about 9 inches in diameter) than the deeper bowl forms. Rimmed ironstone dinner plates were very common in the Algiers Point collection; interestingly, these were larger (about 9-1/2 inches in diameter) than the pearlware soup plates. Ironstone cups were thicker and heavier in appearance, and they were larger (3 to 3-1/2 inches diameter, and about 3 inches deep) than their pearlware counterparts. Undecorated porcelain cups and plates had similar proportions to those of ironstone. Porcelain and ironstone cups and saucers are plentiful in the Algiers Point collection, while relatively few pearlware cups and saucers were recoverd. Figure 59 illustrates some of the major ceramic classes recovered from Algiers Point; Figures 60 and 61 show a number of Makers Marks observed in the ceramic subassemblage.

Glass Artifacts

At the end of the eighteenth century, the majority of



Key to Figure 59

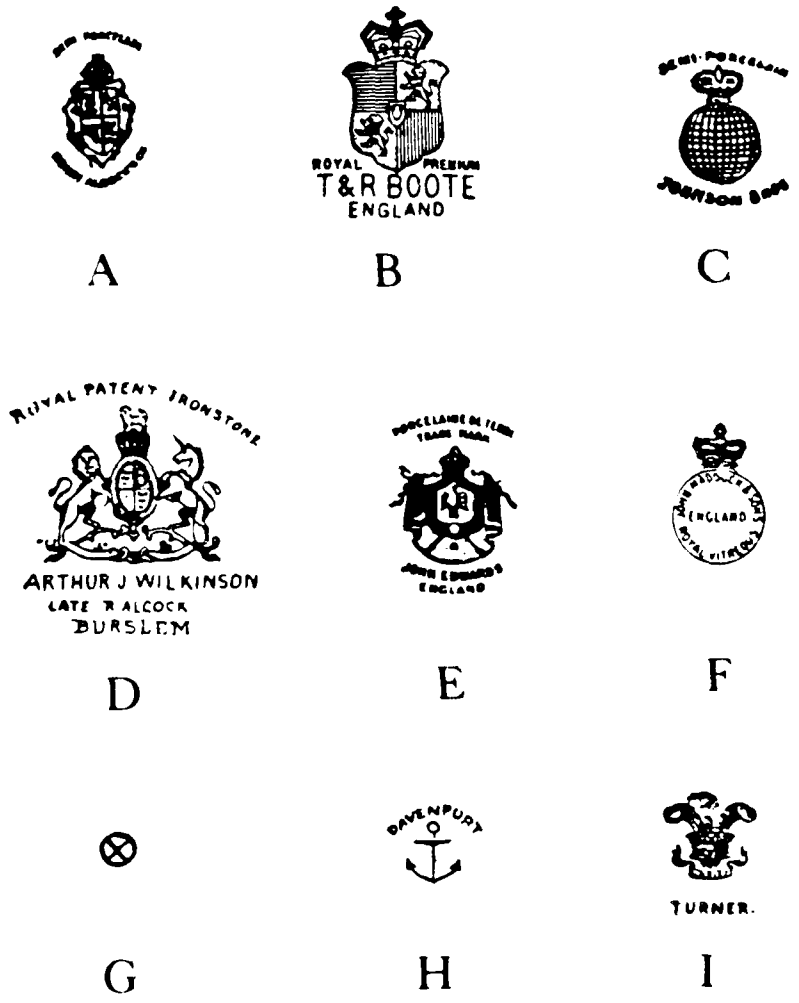
A-C Blue Shelledged Pearlware; **D** Blue Transfer-Printed Whiteware/Ironstone; **E** Red Transfer-Printed Pearlware; **F** Black Transfer-Printed Pearlware; **G** Stamped Whiteware/Ironstone; **H** Annular Creamware; **I** Trailed Slip Annular Pearlware; **J** Annular Pearlware; **K** Flow Blue Ironstone; **L** Ironstone; **M** Late Spatter; **N-O** Yellowware; **P** Annular Yellowware; **Q** Mocha Yellowware; **R-S** Rockingham Ware; **T** "Annular" Refined Redware; **U** Saltglazed Redware, Albany Slip Interior; **V-W** Clear Glazed Redware; **X** Saltglazed Grey Stoneware, Brown Exterior Engobe; **Y** "Jackfield" Ware.

Figure 59. Selected ceramic sherds from Algiers Point.

Key to Figure 60

A United States Pottery, Co., 1889-1901/1907- ca. 1920. East Liverpool, Ohio; **B** Knowles, Taylor and Knowles, 1905-ca. 1920. East Liverpool, Ohio; **C** Burford Brothers, 1881-1904. East Liverpool, Ohio; **D** Potter's Co-operative Co., 1882-ca. 1895. East Liverpool, Ohio; (Gates and Ormerod 1982).

Figure 60. Selected makers' marks from Algiers Point.



Key to Figure 61

A Henry Alcock and Co., 19th century. Cobridge, Great Britain; **B** T. and R. Boote, after 1891. Burslem, Great Britain; **C** Johnson Brothers, est. 1883. Great Britain; **D** Arthur J. Wilkinson, 19th century. Burslem, Great Britain; **E** John Edwards, after 1891. Fenton, Great Britain; **F** John Maddock and Sons, after 1891. Burslem, Great Britain; **G** Spode, 1784. Stoke-on-Trent, Great Britan; **H** John Davenport, 1793-1882. Longport, Great Britain; **I** John Turner, est. 1872. Longton, Great Britain; (Lovel and Kovel 1953).

Figure 61. Additional makers' marks from Algiers Point.

glassware was blown, and the resultant product was referred to alternately as free blown, hand-blown, or as off-hand-blown glass (Lorraine 1968:35). This glassware is characterized by an asymmetrical shape and by the lack of mold seams. As an alternative to free-blown glass, bottles also could be blown into a one piece dip-mold, which shaped the body of the piece, while the shoulders, neck, and lip of the vessel were hand finished, and thus tended to be asymmetrical. Both free-blow and dip-molded bottles had to be held by some method while the bottle was finished; this was accomplished using a pontil. While the bottle was still attached to the blow pipe, the pontil rod was attached to the base with molten glass. The bottle then was struck off the blow pipe, and the lip and neck of the vessel was finished. When the pontil rod was removed, it left a pontil scar on the base. There are basically three different types of pontil scars. The first, the rough pontil, is characterized by bits of broken glass adhering to the base from where the glass-tipped pontil was broken off. The second pontil scar type is from a blow pipe pontil; it is characterized by a rough ring of glass on the bottle base. This results from using the blow pipe as the pontil rod. When the bottle is removed from the blow pipe, a ring-shaped molten neck remnant adheres to the blow pipe. This remnant then creates the ring-shaped pontil scar when the blow pipe pontil is broken off the bottle base. The third, the sand-tipped pontil scar, resulted from the use of a glass-tipped pontil rod covered with sand; this produced a rough scar, often with sand adhering to the base (Jones 1971).

Within the first two decades of the nineteenth century, hinged molds that shaped the shoulders and the necks of the vessels as well as the body came into widespread use in the United States and England. The three-piece hinged mold had a dip mold body and a two piece, hinged section, which served to form the shoulders and the neck. Bottles molded in a three-piece hinged mold have a seam horizontally around the shoulder and a vertical seam up the neck from the shoulder seam. There is no base seam.

A second type of hinged mold was the two-piece hinged bottom mold. Occasionally utilized in the United States after 1810, these two-piece molds were hinged at the base. Therefore, the resultant bottles had a single vertical seam that ran down the neck and body of the vessel, across the base, and up the other side. However, if a pontil rod was utilized during the finishing of the bottle, the base seam may be obliterated by the pontil scar (Baugher-Perlin 1982:263). By the mid-1840s, two-piece molds began to replace three-piece molds (Lorraine 1968:40). During the 1850s, the two-piece mold was improved and made more stable by the use of cup bottoms and post bottoms (Haskell 1981:62). In the former, a rounded seam encircles the base of the vessel, rather than crossing the bottom. In the latter, the side seams run over the base of the vessel to meet with a basal circular seam.

In the late eighteenth and nineteenth centuries, bottle lips were cut off with shears while the glass was still soft. This process was known as a sheared lip, and it is characterized by an abraded, plain cylindrical top. Midway through the nineteenth century, two other lip finishing techniques came into general use.

The first was the technique of applying a ring of glass at or below the neck opening. This technique, called "laid on ring," is distinguished by irregularities of the lip itself. The second technique, called an applied lip or tooled lip, employs the use of what was known as a lipping tool. This consisted of a central piece which was placed within the bottle neck and an external arm which, when rotated, formed an even lip of soft glass applied to the neck of the vessel. It should be mentioned that during this process of applying the lip and finishing the vessel, the neck seam had a tendency to be obliterated as a result of reheating the neck. Consequently, the seam only went partially up the neck.

New techniques for holding bottles during finishing also were developed in the mid-nineteenth century. The improved pontil, or the bare iron pontil, came into general use around 1840. The scar from this type of pontil is smooth, and exhibits both an iron oxide residue and a distorted kickup (White 1978:65). During the 1850s, the snap case was introduced. This device had four curved and padded arms, which were clamped around the bottle so that it could be held during finishing. Bottles held in a snap case have no pontil scar on the base. Use of a snap case almost entirely replaced use of the pontil rod by the 1870s (Haskell 1981:30).

After the War Between the States, there was a tremendous increase in the number and kinds of pharmaceutical bottles produced in the United States. New shapes appeared in the early 1860s, such as the paneled flask and the French square. Embossed lettering on bottles became popular at this time and remained popular until the 1920s. A slug plate inserted into a standardized mold enabled inexpensive personalization of bottles. The pharmaceutical bottles that were not embossed had recessed panels for the application of labels.

Turn molds were introduced about 1870. The interiors of these molds were covered with paste, which allowed the bottle to be turned in the mold. This process resulted in the removal of vertical seams, but left horizontal striations on the bottle body.

During the 1880s, manganese oxide began to be utilized to eliminate the natural color of glass. Because of the presence of manganese, such glass tends to become amethyst colored when exposed to the sun. The use of manganese oxide to clarify glass continued until the outbreak of World War I. Between 1916 and 1930, selenium also was utilized as a decoloring agent. Selenium tints the glass a light amber with exposure to the sun (Munsey 1970:55).

At the end of the nineteenth century, the semi-automatic bottle machine was developed, and used to produce wide mouth jars. Jars manufactured by this process have seams running up to, but not over, the lip (Lorraine 1968:43). A fully automatic bottle machine was developed and patented by Michael Owens in 1903. All hand labor was eliminated with this process; the glass was drawn into the mold by suction. Bottles manufactured by this process have a ring seam around the base, and the side seam is continuous up to and including the lip. By 1920, the change to automated production of bottles was complete.

Prior to the late 1820s, glass tableware only was decorated by cutting. In 1827, the glass pressing machine was patented in

America. The device consisted of a plunger, which pressed the molten glass into a mold. Because vessels produced by this method had to be wide mouthed, it was used to produce tablewares. From the time of its introduction until the 1840s, stipled, so-called "lacey," patterned pressed glass was popular. This technique gradually was replaced by pressed glass patterns which imitated cut glass.

Initial classification of glass sherds from Algiers Point involved detailed examination of the collection on a sherd-by-sherd basis (Table 18). This procedure proved to be extremely time consuming and it provided little useful morphological and chronological information. Glass fragments subsequently were classified and counted by color (Table 19). In addition, bottle necks, bases, and large body fragments were set aside for examination and tabulation of datable manufacturing attributes. These were recorded on a presence/absence basis in order to gain chronological information (see Chapter 7). Only whole or nearly whole bottles received full classificatory treatment (Table 20).

A total of 103 whole or nearly whole bottles were recovered from Algiers Point. Table 21 presents the functional types of these bottles. By far the most common bottle type found comprised apothecary or pharmaceutical bottles. The growth of the bottle making industry at mid-nineteenth century coincided with a dramatic expansion in the pharmaceutical industry. New bottle manufacturing techniques permitted the introduction of new shapes, and in many cases bottle form was content-specific. The late nineteenth century also was the heyday of the patent medicine industry. The term "patent medicine" referred to any over-the-counter medicine. Some of these, such as Hostetter's Stomach Bitters and Andries' Sasparilla Bitters, were alcohol based concoctions. A number of jars for medicinal ointments, such as vaseline, also were found. A list of manufacturers of medicinal products represented in the Algiers Point collection is contained in Table 22.

Advances in bottle manufacturing technology had a direct effect on the commercial food packing industry. During the first half of the nineteenth century, packing foods in tins was the only safe procedure since hand-made bottles could not provide an airtight seal. In 1858, John Mason patented the screw-top jar seal, which provided an airtight seal for canning and a recloseable lid. Soon thereafter, bottles for commercial food packing came into widespread use for preserves, condiments, and sauces. Worcestershire Sauce bottles, both from Lea and Perrin and from Courtenay and Company, were recovered at Algiers Point, as was a bottle of Louisiana Pepper Sauce. Eighteen other condiment bottles, were found at Algiers Point (Table 21).

Thirty-one beverage bottles were recovered at Algiers Point. Eleven of these formerly contained seltzer or mineral water, and most of these were in the form known as a "ballast bottle." Manufactured and filled in the British Isles, these early nineteenth century bottles were shaped to facilitate packing. After this practice stopped around the middle of the nineteenth century, the form continued in use for domestic bottled water. Several New Orleans bottling houses (Table 23, Nos. 1 - 4) are

TABLE 21. Functional Types of Whole Bottles, Algiers Point.

	Sq. 21	Sq. 13 Lot 13	Sq. 13 Chur.	Sq. 10 Lot 8	Sq. 10 Lot 6	Sq. 13 Lots 1&2	Tot.
Seltzer/mineral water	4	1	5	1			11
Soda/beer/ale		5	2	1			8
Wine	1	5	1				7
Distilled Spirits	1	1	3				5
Apothecary/ pharmaceutical	19	10	3			1	33
Medicinal, alcohol	1		2				3
Medicinal, ointment		3					3
Perfume/ cosmetics	2	3			1		6
Ink	2	1	1	1			5
Condiment	15	4	1	1			21
Olive oil	1						1
TOTAL	46	33	18	4	1	1	103

TABLE 22. Medicinal Products Identified by Bottle Embossing from Algiers Point.

Lot Provenience	F.S No.	Embossing
Sq. 13, Church lot	102	DeWitt's Colic & Cholera Cure (Chicago)
	107	Mrs. Winslow's Soothing Syrup
	141	Dr. J. Hostetter's Stomach Bitters
Sq. 13, Lot 13	180	Vaseline
	249	Dr. Sanford's Liver Invigorator (New York)
	378	Dr. J.J. Kerr's Family Medicines
	427	Mrs. Winslow's Soothing Syrup
Sq. 21	36	Hydrogen Peroxide (New York)
	36	Dr. DeAndries' Sasparilla Bitters (New Orleans)
	434	Listerine
	434	Ayer's Pills (Lowell, Mass.)
	436	Bromo Seltzer (Baltimore)

TABLE 23. Soda and Mineral Water Bottles from New Orleans Bottling Houses.

C.C.S & M. Co. 270 to 274 Royal Street
Consumer's S 7 M Water Mfg. Co. Ltd.
Dr. Hall 350 Bienville St.
Keaveny & Buckley City Bottling House 69 to 71 S. Liberty St.
Cosmopolitan Bottling Co. Ltd.
World Bottling Co. Ltd. Royal & Montegut Sts.

Key to Figure 62
(Left to Right)

Green Paneled Flask, Two-Piece Mold, Tooled Lip; Green Pharmaceutical Bottle, Two-Piece Hinged Mold, Blow Pipe Pontil, Tooled Lip (Mrs. Winslow's Soothing Syrup); Green Bottle, Two-Piece Mold, Post Base, Tooled Lip; "Opaque Black" Bottle, Three Piece Mold, Tooled Lip; Green Bottle, Two-Piece Mold, Cup Base, Tooled Lip (Keaveny Buckley & Co.).

Figure 62. Selected glass bottles from Algiers Point.

represented in the Algiers Point collection. Local companies also produced soda (or beer) bottles (Table 23, Nos. 5-6). Wine bottles also were plentiful in the Algiers Point collection, as were bottles which formerly contained scotch and whiskey.

Six bottles and jars which were utilized for perfumes, creams, and for cosmetic ointments were found. Bottles from the Lubim, and Roger & Gallet Paris parfumeurs came from Lot 6 and Lot 13, respectively. Finally, ink bottles were recovered from almost every lot (Table 21). Figure 62 illustrates whole bottles from Algiers Point that demonstrate changing glass technology during the periods in question.

Metal Artifacts

Large quantities of metal were recovered from Algiers Point. Most of the metal found was badly corroded and unidentifiable. Similarly, most metal from Algiers Point derived from late nineteenth and early twentieth century industrial occupation of the area, which included several ironworks. Corroded and scrap metal was weighed (Table 24). Identifiable metal artifacts were counted by provenience.

Just under one thousand individual metal artifacts were identified. These are tabulated in Table 25. Metal artifacts span a tremendously wide range of activities and origins. In addition to nails and spikes, washers, grommets, bolts, nuts and screws were found. Lost or discarded metal tools found include files, knives, a caliper, needles, and scissors. Kitchen utensils found include knives, spoons, pots, kettle fragments, and a grill.

Miscellaneous Artifacts

Many of the miscellaneous artifacts are small, personal artifacts likely to have been lost, rather than discarded. Buttons are a good example of such an artifact type; they easily fall off clothing and seldom are retrieved. The majority of buttons found were plastic, followed by milk glass buttons (Table 26 and 27). The latter type dates from the period 1887-1910 (Peacock 1972). Bone and shell buttons also were recovered in small quantities; almost all were the four-holed, sunken panel variety common between 1800-1865 (South 1964). Jet buttons also were found. Jet was popular during the second half of nineteenth century, particularly for mourning jewelry, and these buttons probably date from this time period. Plastic and glass shirt studs also were recovered.

Some of the toys found at Algiers Point, such as marbles and game pieces, probably were lost articles. The majority of the former were stone. Usually made from marble or limestone, the marbles were produced in Germany during the eighteenth and nineteenth centuries. They declined in popularity after 1870. Ceramic marbles, including glazed, unglazed, and painted specimens common during the latter nineteenth century were recovered at Algiers Point. All glass marbles that were found were machine produced and post date 1926.

A large number of porcelain doll parts were found. Most of the doll heads were slip cast and subsequently painted and glazed, glazed only, or left in the biscuit state. Arms and legs also were recovered in large numbers; these were grooved to allow attachment to cloth bodies. The terminus post quem for these dolls is no earlier than 1860, and they probably date post 1880. A number of parian and glazed porcelain "frozen Charlottes," or small, one piece molded and immobile dolls also were found. Toy dishes, the majority of which were porcelain, were recovered from excavation at Algiers Point; these probably date from the second half of the nineteenth century.

A few notable religious artifacts were found during excavation at Algiers Point. A fragment of a porcelain wall hanging was found. It appears to depict the Thirteenth Station of the Cross: Jesus is Taken From the Cross (Mary Stewart, personal communication 1984). In addition, a Miraculous Medal was recovered; it depicts the Virgin Mary on one side, and the obverse shows a cross intertwined with a capital "M." Another medal depicts Mater Dolorosa; one side shows a figure pierced by seven swords, and a kneeling figure is on the other side. This medal has rings attached at both the top and the bottom; it probably was formerly part of a rosary (Rev. Msgr. Henry C. Bezou, personal communication 1984).

Several doorknobs were found; most of these were made of scroddled brownware. Scroddled brownware was produced by the mixing of two different colored clays to give a marbled appearance. These were manufactured between 1840-1900 (Ramsey 1947:148).

The remainder of miscellaneous artifact types (Table 26 & 27) do not warrant further discussion. A number of these obviously are of recent or modern vintage, e.g., plastic articles and a light bulb.

Soil Flotation Analysis

Soil matrix samples were taken from every provenience unit recorded during the Algiers Point data recovery field effort. These samples were designed to yield artifactual and ecofactual data which may not have been obtained during systematic excavations in the field. However, laboratory examination of flotation samples revealed that little additional data pertaining to the archeological record at Algiers Point would be forthcoming, and that *in situ* recovery of archeological data provided a substantial sample of both artifactual and ecofactual data illustrating the nature and variability of the assemblage at large. During water separation and preliminary examination of over one hundred samples, it was observed that virtually all classes of remains from the site were present in quantities of small fragments.

As noted above, flotation and water screening were undertaken on soil matrix samples from each provenience unit, and additional samples from features and refuse deposits also were processed. Heavy fraction samples did not produce a data set which differed qualitatively from those obtained during hand excavation. Artifactual and ecofactual inventories consisted variously of

metal fragments, brick fragments, mortar, slate, cinder, pebbles, fragments of ceramics and glass, coal, charcoal, oyster and rangia shell fragments, and the faunal remains of commensal rodents. Complete artifacts also were recovered, such as metal nails and marbles. However, hand excavations already had succeeded in recovering a representative sample of similar types, and in greater numbers. Light fractions included fragments of charcoal and wood, as well as small fragments of bone, coal, ceramics, and glass. Again, all of these remains were recovered in greater quantity and in better condition during hand excavations.

The remains from flotation analyses derived from standard volumetric units of soil matrix (one or three liter samples), and provided the opportunity for quantitative analysis of the samples. However, despite the care taken to secure a statistically valid sample, few, if any, research questions require such fine-grained analysis.

Experience with soil matrix sampling and flotation analysis from several historic archeological sites in southern Louisiana, including the Algiers Point Historic District, has provided substantial information on the utility of an across-the-board application of flotation techniques at historic sites in the region. A comparison of the results obtained through flotation analysis vis-a-vis hand excavation are available from archeological test excavations and data recovery efforts undertaken during the course of cultural resources investigations at the New Orleans General Hospital site (16 OR 69), Elmwood Plantation (16 JE 135), the Old Courthouse site (16 SJ 35), and Harlem Plantation (16 PL 85). These results illustrate that soil flotation samples rarely, if ever, provided novel information concerning any subassemblage of artifactual or ecofactual data. Rather, then provide redundancy to the data. In most cases the analysis did not significantly enhance reconstruction of environment, diet, economy, chronology, or technology. This especially is the case in the absence of problem solving formulation requiring such a specialized analytic tool (cf. Watson 1977), and targeting specific samples for study.

CHAPTER VII
THE ARCHEOLOGICAL CHRONOLOGY OF ALGIERS POINT

A modified version of Stanley South's (1977:201-236) Mean Ceramic Date formula was used to date the ceramic subassemblages from Algiers Point. This formula was developed as a method for calculating the mean date of manufacture for British ceramics found on eighteenth century historical sites. Like Ford's (1962) seriational method, the MCD formula is based on the twin assumptions of normalcy and unimodality, so that a ceramic type's peak popularity is represented by the median date between its introduction and discontinuance in the sequence. South's date ranges for each of seventy-eight ceramic types are derived in large part from Ivor Noel Hume's A Guide to Artifacts of Colonial America (1970), and from personal communication with Noel Hume.

Although Mean Ceramic Dating was developed for eighteenth and early nineteenth century ceramics, South (1977:213) did not preclude its application to nineteenth century sites. Rather, he offered the possibility that the formula might be extended to include additional types, providing that dates of manufacture are known. In fact, this is a necessity if the formula is to be used with any accuracy for subsequent periods. The major limitation of the method as presented by South (1977) is that as one historically approaches and surpasses the mid-nineteenth century, mean ceramic dates become increasingly too early (Goodwin et al. 1983a, 1983b; Goodwin and Yakubik 1982a, 1983). The following types, date ranges, and median dates, as shown in Table 28, constitute both a modification of South's method and an addition to his original data base.

In addition, Worthy (1982) makes the excellent though obvious suggestion of utilizing datable makers' marks to provide date ranges and median dates for individually marked pieces. Of course, the limitation to this method is that one cannot expect to get an adequate sample of makers' marks from an individual provenience to yield reliable dates. However, a substantial number of sherds recovered from Algiers Point bore makers'. The combination of Worthy's (1982) system with the date ranges and median dates provided here broaden the usefulness of this method.

A list of Mean Ceramic Dates for Algiers Point is contained in Table 29. As a cautionary note, it should be recognized that the fewer sherds utilized in the calculation of the MCD, the greater the probability that the date is skewed or inaccurate.

Enclosed refuse concentrations from Algiers Point produced a number of whole, substantially whole, or reconstructable bottles. These also can be used for dating purposes. Previously, it has been hypothesized that bottles are more accurate chronological markers than ceramics for periods after bottles began to be mass produced during the nineteenth century. This is based on a more rapid discard rate, since bottles were discarded shortly after they were emptied of their contents (Goodwin and Yakubik 1982a). Ceramics presumably would be used until broken, or even repaired after breakage. By comparing

TABLE 28. Types, Date Ranges, and Median Dates of Ninetenth Century Ceramics.

Type	Date Range	Median Date
Transfer-printed pearlware	1795-1830	1813
Transitional pearlware/white colored earthenware types	1800-1830	1815
Transfer-printed transitional pearlware/white colored earthenware	1800-1840	1820
Stoneware, glazed in any way with an Albany slip	1810-1900	1855
Embossed edge whiteware/ ironstone	1820-1840	1830
Salt glazed redware, unglazed interior	1825-1850	1838
Flow blue whiteware/ironstone	1830-1880	1855
Blue Chelsea	1830-1880	1865
Yellowware	1830-1900	1865
Rockinghamware	1830-1900	1865
Brownware	1830-1900	1865
Annular Yellowware	1840-1900	1870
Mocha Yellowware	1840-1900	1870
Unglazed brownware (yellow colored earthenware)	1840-1900	1870
Ironstone	1850-1940	1895
Blue Chelsea ironstone	1850-1880	1865
Flow blue ironstone	1850-1880	1865
Parian	1850-1900	1875
Salt glazed redware, Albany slipped interior	1850-1880	1865
English Majolica	1851-1900	1876

TABLE 28. Continued

Type	Date Range	Median Date
Albany slipped redware	1860-1900	1880
Albany slipped and lead glazed redware	1860-1900	1880
Late Spatter	1880-1920	1900
Porcelaneous stoneware	1880-present	1930
Clifton/Avalon ware	1882-1914	1898
Decaled wares	1900-1950	1925

TABLE 29. Mean Ceramic and Bracketed Glass Dates and Ranges for Algiers Point Proveniences.

FS#	Provenience	MCD	n	Bracketed Glass Date
1	Trench 1	1860	7	
3	Trench 4	1875.8	40	1845-1915
4	Trench 5	1842.8	72	1856-1915
5	Trench 6	1893.9	11	
6	Trench 7	1848.4	25	
8	Trench 9	1869.3	47	1856+
9	Trench 3	1816.6	16	1845-1920
10	E1-SE-1	1857.5	28	1895-1915
11	E1-SE-2	1861.5	61	1880-1915
12	E1-NE-ST	1869.4	41	1885-1915
13	E1-NW-S	1883.1	8	1895-1920
14	E1-SE-S	1872.2	29	1880-1910
15	E1-SW-S	1860.0	3	
17	E1-SE-3	1879.8	23	1880-1915
18	E1-SE-4	1887.1	76	1880-1915
19	E1-SE-5	1848.4	67	1840-1915
22	E1-NE-1	1881.5	10	1880-1915
23	E1-NE-2	1873.2	55	1862-1904
24	E1-NE-3	1868.5	78	1895-1915
25	E1-NE-4	1865.5	244	1856-1904
26	E1-NE-5	1842.6	123	1880+
27, 412	E1-NE-6, 7	1842.1	33	1815+
29	E1-Feature 5	1843	6	
30	E1-NW-1	1877.4	36	1895-1915
31	E1-NW-2	1873.8	163	1880-1915
32	E1-NW-3	1867.9	165	1856-1915
33	E1-NW-4	1833.5	46	
35	E1-SW-1	1864	45	1880-1915
36	E1-SW-2	1871.5	94	1880-1915
37	E1-SW-3	1865.1	94	1880-1915
40	E2-1	1849.8	32	1880-1910
45	E3-4	1853.1	63	1856-1920
46	E3-5	1833.9	19	
49	E1-Feature 11	1861.6	11	1904+
50	E1-Feature 12	1840.6	5	1856-1880
72	Square 13 - Church lot-S	1879.0	46	1845-1904
76	Feature 19	1862	5	
81	Feature 24	1864	5	
87	Feature 30	1875	7	
90	Feature 33	1872.5	8	
94	Feature 37	1861.9	18	
96	Feature 39	1894.2	12	1880-1910
98	Feature 41	1871.3	8	
99	Feature 42	1867.2	87	
102	Feature 45	1888.1	39	1856-1880
106	Feature 49	1838.3	12	1840-1910

FS#	Provenience	MCD	n	Bracketed Glass Date
107	Feature 50	1885.8	174	1880-1920
109	Feature 52	1864.5	76	1880-1910
115				1845-1880
118	Feature 57	1877.5	4	1840-1880
122	Trench 10	1823.3	6	1840-1880
123	Trench 11	1880.4	164	1880-1920
125	Feature 59	1889.0	180	
126		1891+	1	
136	Feature 33			1880-1920
137	E4-1	1875.6	17	1880-1920
138				1856-1910
139	Feature 23-IV			1880-1910
141		1891+	1	
143	E4-3	1878.4	195	1855-1880
144-6	Feature 23-6-8	1891.0	92	1880-1910
155	Feature 62	1878.2	36	1880-1910
156	Feature 63	1876.9	8	1856-1910
157	Feature 64	1863.8	24	
159	Feature 65	1882.3	84	1880-1910
160	Feature 66	1871.7	3	
161	Feature 66	1878.8	17	1880-1910
172	Feature 67	1886.3	4	
174	E5-1	1894.5	10	
175	E5-2	1884.4	8	1880-1910
176	E5-3	1886.3	4	
178-81	E7-Feature 69	1881.1	189	1880-1915
182	E10-1	1863.3	9	
184	E10-3	1861.7	6	1850-1880
186	E12-2	1895	3	
187	E12-3	1868.8	8	1850-1880
189	E13-1	1865.6	9	
190	E13-2	1874.1	35	1845-1880
191	E13-3	1880.3	29	
192	E13-4	1878.8	12	
193	E13-5	1877.5	4	
194	E6-1	1880.7	7	1880-1910
195	E6-2	1873.7	19	
196	E6-3	1888.7	27	1856-1910
199		1887.7	3	
202	E11-1	1888.5	10	1862-1910
203	E11-2	1827.0	5	1856-1910
204	E11-3	1864.2	104	1880+
206	E15-2	1895	3	
207	E15-3	1820+	1	
208	E15-4	1860.9	22	
209	E15-5	1877.5	2	
211	Feature 65-2	1885.9	11	
212	Feature 65-3	1870.7	15	
213	Feature 65-4	1868.8	4	
215	Feature 70	1885.5	43	
216	Feature 71	1896.9	16	

FS#	Provenience	MCD	n	Bracketed Glass Date
248	E16-1	1892.3	11	1904-1920
249	E16-2	1877.5	2	1856+
250	E16-3	1857.5	18	1880-1910
251	E17-S	1820+	1	
252	E17-1	1827	5	1862-1910
253	E17-2	1895	6	1880-1920
255	E17-4	1832.5	2	
330	E9-1	1882.3	31	1880-1915
331,332	E9-2, E9-3	1882.2	30	1880-1900
333	E9-4	1875.9	52	1880-1910
338	E14-1	1878.6	22	1880-1920
339	E14-2	1891.1	9	
340	E14-3	1886.3	70	1860-1920
341	E14-4	1872.1	12	1856-1910
342	E18-1	1860	2	
343	E18-2	1856	5	
344	E18-3	1862	5	
345	E18-4	1853.3	3	
348	Feature 65	1862.5	6	
352	E20-1,2	1867.4	90	
353	E20-3	1885	12	
354	E20-4	1871.1	18	
355	E20-5	1876.8	57	1856-1920
358	E19-1	1840.3	3	
367	Feature 117	1871.9	19	
377	E12-5	1820+	1	1880-1920
378	Feature 70	1876.8	60	1845-1910
380	Feature 88	1884.7	17	
381	Between E6-F65	1882.5	6	
382	Between E6-E13	1877.9	29	1880-1910
383	Trench 13 midden	1884.7	17	1880-1910
384	Trench 13 clay	1863.3	9	
385	Trench 14 upper	1868.3	12	
386	Trench 14 clay			1860-1880
387	Trench 15 upper	1885.5	11	
388	Trench 15 clay	1877.2	9	1862-1910
413	E2-S	1812.9	11	
416	E1-BHE	1865	7	1855-1920
418	Feature 16	1866.6	58	
419	Between F16-17	1883.3	3	
421		1884.6	10	1856-1880
422		1871.7	6	1880-1915
423	E1-NBHE	1851.7	39	1880-1915
424	E1-EBHE	1857.9	98	1850-1900
425	E1-E3 BHE	1846.6	28	1845-1880
426	E1-SE-gen.coll.	1864.4	86	1858-1904
427	Horizontal stripping	1877.9	499	1850-1915
428	Horizontal stripping	1848.5	109	1845-1910
430	Horizontal	1842.1	46	1845-1910

FS#	Provenience	MCD	n	Bracketed Glass Date
433	Trench 18	1820+	1	
434	E1-EBHE	1864.6	729	1856-1915
435	E1-EBHE	1852.4	206	1856-1915
436	E1-NBHE	1849.5	388	1858-1904
437	Rear lot 13	1868.1	48	1880-1920
438	West lot 13-F61	1866.9	54	1856-1904
439	Feature 65-1	1876.7	39	1850+
457	Trench 26	1820+	1	1904+
465	Trench 27	1857.9	12	1880+
473	E21-1	1830	2	
476	E21-3	1805	2	
478	E21-4	1852.5	10	
480	Trench 28	1841.1	44	
488	E21-5	1809.6	16	
501	Trench 29-1-6	1865.4	24	1845-1910
502	Trench 29-4	1858.1	42	1856-1910
509	Trench 30-1-3	1895.0	2	
516	Trench 31-1-4	1865.4	36	1840-1850
526	Trench 32-1-7	1832.5	50	
528	Trench 22-2			1880+
529	E22-3	1841.3	16	
530	E22-4	1826.3	15	
543	E22-Feature 128	1848.8	4	
544	E23-4	1848.3	9	
545	E23-6	1845.1	44	1845-1910
553	E24-4	1878.0	37	
554	E25-2	1860.6	8	1856-1910
560	E25-4	1849	5	
564	E26-5	1863-4	25	1850-1910
565	E26-5	1864.6	12	
567	Trench 33	1880.0	10	
569	Sq 10, Lot 8-S	1862.2	16	1904+
570	Sq 10, Lot 6-S	1850.0	3	1850+

mean ceramic dates to glass dates, cases of relict use of ceramics may be identified (Goodwin and Yakubik 1982a). Bottles may be dated effectively utilizing bracketed dates.

Success in the application of bracketed glass dating techniques does have limitations for early nineteenth century subassemblages, in large part due to small sample sizes that are documented empirically. During analysis of artifacts from Elmwood Plantation (16 JE 138), it was noted that relatively little glass was recovered from late eighteenth and early nineteenth century components. The same pattern was observed during analysis of artifacts from Algiers Point. These observations led to the probative hypothesis that the ratio of glass to ceramic sherds increased through time during the nineteenth century. A combined sample comprised of glass and ceramic sherds from tightly dated proveniences was divided into six periods of ten years each, from 1830 to 1890. Relative frequencies of glass and ceramics were calculated for each period, and the results were plotted a frequency polygon (Figure 59). During the first two periods (1830-1840 and 1840-1850), the relative frequency of glass is relatively low (19.49% and 21.58%, respectively). In the third period, a slight increase in the frequency of glass sherds is seen (27.12%). Between 1860-1870, the frequency of glass increases to 50%, and it subsequently stabilizes at about this level (Figure 64). This diachronic increase in glass illustrates a boom in the glass making industry during and immediately after the War Between the States. As will be seen, many important bottle making techniques were introduced during the late 1850s. Devices such as the snap case (1855), the lipping tool (1856), and the blow-back mold (1858), simplified bottle manufacture and thereby made bottles cheaper and easier to produce. The pharmaceutical industry experienced rapid growth during the War, and new bottle shapes were introduced at this time. The developement of the slug plate ca. 1860 permitted the inexpensive and uncomplicated embossing of bottles. In short, during the late 1850s and early 1860s, bottles became more common place and they began to be used for more purposes than ever before. The net result was that glass articles became more expendable, as seen in the material record.

Recently, Hill (1982) has presented research that would seem to disprove assumptions of rapid deposition of glass bottles. Hill utilized an adaptation of South's (1977) Mean Ceramic Date formula to demonstrate a substantial lag time between the manufacture of a bottle and its subsequent deposition. This was accomplished by finding the difference between the mean manufacturing date for a collection of bottles and the documented terminal date of the site. A close examination of Hill's calculations reveal problems inherent in technique that produce seemingly lengthy "lag" times between a bottle's manufacture and its discard. First, the mean manufacturing date of the bottles is subtracted from the terminal date of the site. Two of Hill's test cases (the Custer Road site and the Silcott site) had lengthy deposition histories. It is unlikely that all of the bottles were

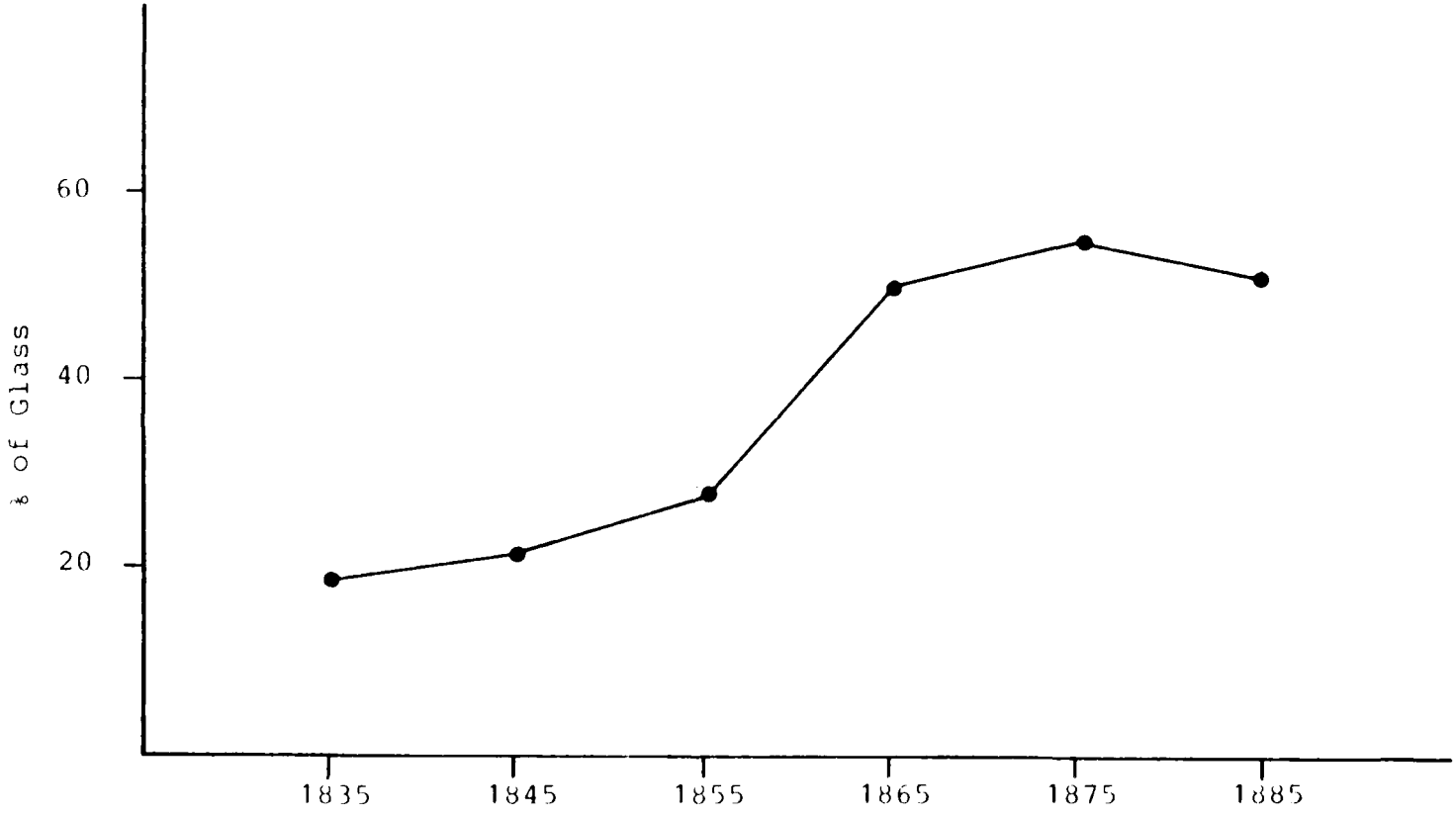


Figure 64. Diachronic pattern of change in frequency of glass sherds as percentages of combined glass and ceramic sherd subassemblages.

discarded during the last year of the site's use. Thus, there naturally is a "lag" between the average manufacturing date of the artifacts and the site's closing date. Hill's other two test cases are a commercial steamboat cargo ship (the Bertrand wreck site) and a trash deposit of short duration, about one year (the Edgewood Site), which presumably would not be affected by the above problem. However, Hill's median dates are skewed to produce a greater "lag" than probably was the case in fact. Hill (1982:293) calculates her median dates as follows:

> When a bottle's manufacturing dates terminate prior to the site's documented closing date, the bottle's median manufacturing date should be calculated as described in (South's) formula. However, if the bottle's manufacturing dates extend beyond the time the site was closed it is necessary to use the site's documented terminal date as the bottle's terminal manufacturing date. This adjustment acknowledges that the artifact could not have been manufactured after its deposition.

While her final statement is accurate, Hill has created a situation in which a particular bottle could never have been manufactured in the same year as its deposition, if that year was the site's terminal date. Hence there will necessarily always be a "lag" between the terminal date of the site and the mean manufacturing date of the bottles, even when the site's deposition history is short.

These two problems have different effects on the resultant data. The latter problem skews the data to produce a "lag" time but it skews the data uniformly. Thus, the researcher can utilize these data to measure differences in the manufacture-deposition time between different functional classes of bottles from the same site, so long as it is recognized that the "lag time" is relative and not measured in real years. The former problem, because it is related to the length of use of a particular site, limits the comparability of "lag times" from different sites. Hill's method (1982) has not established lengthy time periods between a bottle's manufacture and its discard, nor does it address basic differences in discard patterns of ceramics and glass. Mean ceramic dating only provides a single point in time; it gives no data on length of site occupation.

We still maintain that bottles enter archeological contexts more rapidly than ceramics, and that the former may more accurately portray site occupation or use length than the latter. As Stanley South (1977:214-217) has demonstrated, date ranges for archeological sites may be obtained by plotting on a time line the limits of duration of manufacture for each ceramic type recovered. South suggests that this broad range, from beginning to ending date of manufacture, can be refined by bracketing the poles of the bar graph to create an interpreted

period of occupation. The left bracket is placed at a point where "at least half of the ceramic type-bars are touching or intersecting the bracket" (South 1977:214). The same principle is utilized in the placement of the right bracket, except that it must be placed far enough to the right to at least touch the beginning of the latest type present. These bracketed dates may be refined further using the absence of chronologically diagnostic types.

This technique is applicable to any type of artifact for which secure date ranges of manufacture are available and which is commonly found on historic sites. Because of their frequency and known technological chronology, glass bottles are especially amenable to this type of analysis. However, some modifications in this dating technique have been initiated by us as a result of differences between manufacturing techniques for glass and ceramic artifacts. While ceramics generally can be assigned to discrete types which can be dated, the dating of glass is based on a combination of attributes resulting from manufacturing techniques. To illustrate, if a given bottle was recovered that was manufactured using a two piece mold, it may be assigned a date based on recognition that two-piece mold technology came into general use around 1845 and continued in use until around 1920. If further examination of the bottle revealed that it had a lip applied with a lipping tool, the assigned date might be modified because the lipping tools did not become common until about 1856, and it continued in use until about 1920. Finally, if the bottle is made of glass with an amethyst tint, it is known that this was the result of using manganese oxide to decolorize the glass, a technique utilized between 1880-1915. Taking all of these factors into consideration, the date range finally assigned for manufacture of this particular bottle would be 1880-1915.

Additionally, in the classification used for glass bottles, manufacturing techniques also are assigned weights based upon the duration of their industrial use. Returning to the hypothetical bottle, if it is green, rather than clear glass, the situation is confounded since green glass does not have a specific date range. Still, if the bottle was made in a two-piece mold with an applied lip, because the applied lip has a somewhat shorter date range than a two-piece mold (1850-18220 vs. 1845-1920), dating this particular piece would use the range of the applied lip, rather than a combination of traits. In the case of the clear glass bottle, the presence of clear glass provides a terminus post quem for when it could have been manufactured (1880), while the presence of an applied lip limits the latest date of its manufacture. Clear glass is still in use; however, the applied lip ceased to be used ca. 1920. In this case, since both manufacturing techniques are central to accurate dating, the combination of traits must be utilized.

A second problem is posed by the much higher relative frequency of bottle sherds than of complete bottles in most archeological contexts. In cases where a single sherd demonstrates a combination of attributes such as described above, that combination is used in dating. Where only one

datable technological attribute is present, it comprises the sole criterion for dating.

Finally, in order to refine chronological estimates, the absence of clear and amethyst glass is used to delimit the end point of date ranges to 1880, since clear glass tinted with manganese oxide came into widespread use after that date. The absence of bottles manufactured by an automatic bottle machine was used to estimate the end point of the date range at 1910, since the automatic bottle machine was patented in 1903, and its products were ubiquitous by 1920. Therefore, bottles produced by automatic machines would have been present in most contexts, and certainly in urban settings, by 1910. To insure the method is applied consistently, archeological levels with less than two datable manufacturing techniques are not bracketed; instead, when possible, a terminus post quem based on characteristics of the glass is provided. Each datable manufacturing technique or combination of techniques present will appear on the bar graph only once for each unit being dated. Table 30 lists datable manufacturing techniques/attributes and their date ranges. In addition to these, individual bottle types with specific manufacturing ranges have been included wherever possible. Table 29 lists both bracketed glass date ranges and mean ceramic dates for every archeological provenience at Algiers Point.

To recapitulate, a modified version of South's (1977) Mean Ceramic Date Formula was used to date ceramics from Algiers Point. In order to achieve additional chronological control, an adaptation of South's (1977) bracketed date range was utilized for dating. In addition to providing chronological information, such comparisons also yield behavioral information. If it is true that ceramics, being durable, were utilized for lengthy periods of times and that then possibly were repaired and revised after breakage, and if nineteenth century glass was cheap and expendable, and if bottles were discarded when empty, then bottle date ranges also may be used in testing for presence of relict ceramics. A discussion of the implications of artifact dating follows.

TABLE 30. Date ranges for glass bottle manufacturing techniques and glass attributes.

Dip mold	1775-1850
Tow-piece hinged mold	1810-1880
Three-piece hinged mold	1821-1875
Two-piece mold with a separate base	1845-1920
Brown-back mold	1858-1900
Turn mold	1870-1920
Semi-automatic bottle machine	1894-1920
Automatic bottle machine	from 1904
Rough pontil	to 1875
Improved (bare iron) pontil	1840-1880
Snap case	1855-1920
Sheared lip	to 1850
Laid on ring	1840-1880
Tooled lip	1856-1920
Crown cap	from 1895
Pressed glass	from 1827
Slug plate	from 1860
French square pharmaceutical bottle	from 1860
Recessed label paneled flask	from 1862
Pearl top gaslamp	from 1883
Crimp top gaslamp	from 1885
"Opaque black" glass	1815-1885
Amethyst glass	1880-1915
Clear Glass	from 1880

CHAPTER VIII
TESTING THE ARCHEOLOGICAL RECORD

As Chapter 4 demonstrated, deficiencies in the documentary and archival record limit the explanatory power of the direct historical approach at Algiers Point. The nature and degree of these limitations varies from square to square and for lots within squares. Little information exists regarding the history of Square 10, Lot 6, except that three rental houses were present there at the end of the nineteenth century. These dwellings were removed between 1896 and 1898. Historic documentation of Square 10, Lot 8, also is sketchy. Fritz and Reeves (1983) present a history of this lot for the period 1856-1907. Most of the archeological remains recovered there date from the 1840s and earlier (Table 29). While current documentation of the early nineteenth century in this locale is largely archeological,site destruction processes have limited the record.

E1 on Square 21 produced two stratigraphically and temporally distinct components, which can be dated approximately to the ante-and post-bellum periods (Table 29). These remains were recovered from an area where a small dwelling previously stood. Although the history of land use on Square 21 is relatively complete, and it is known that Salter, and later Marcy, lived elsewhere on this square, there is no record of when this particular residence was built or of who inhabited it. However, it is likely that this represents one of "two other smaller houses" mentioned by Reeves (1983:16) as standing on the lot by 1839. This structure was destroyed sometime before 1909 (Sanborn Insurance Map, 1909, plate 700).

Documentation for Square 13 is far more complete than the previous examples. The historic record for lots 1 and 2 is fairly detailed, but virtually no archeological remains were recovered from lots 1 and 2. The history of the Church lot also is well documented; the Mean Ceramic Dates for this lot suggest that most, if not all material recovered there derived from the church occupation (1849-1872) and from the Guillaud occupation (1883-1895) (Table 29). Comparison of the Mean Ceramic Dates and the bracketed glass dates suggest that the few early dates for this lot are the result of relict ceramic use or sampling error (Table 29). Similarly, the Mean Ceramic Dates from lot 13 suggest that this material is derived from the Shorey occupation (1865-1906), or from the previous Robelot ownership of the property (1839-1865) (Table 29). To recapitulate, the early material from the church lot is derived from the clerical residence and church; the later material from the church lot is associated with the middle-class, mixed residential-commercial (Ruberton 1982:12) Guillaud occupation; and, the later material from Lot 13 resulted from the working-class, residential Shorey occupation. These particular collections, then, provide a comparative baseline against which materials from unknown contexts may be compared.

Recently, Ruberton (1982) found differences in distribution and patterning among five urban depositional

types. The categories utilized in her study included: structural debris resulting from building demolition or decomposition; fill-trash, which consists of material in the interior of a structure resulting from post-abandonment activities; the "fill-other" category, which consists of material from exterior spaces resulting from cultural depositional activities; midden; and, surface debris (Ruberton 1982:129). In general, the data from Algiers Point do not permit such fine-grained distinctions, since in most cases artifact associations were recorded with regard to particular features. Also, the surface of the Algiers Point lots were badly disturbed; consequently, no surface contexts were selected for testing. Finally, it was believed that the deposition pattern of privy fill would differ from the contexts examined by Ruberton (1982). Thus, only three distinct depositional types were investigated for Algiers Point: refuse associated with structural features; middens; and, privy fill. It was hypothesized that different functional classes of artifacts would be represented in different proportions in these three contexts, much as Ruberton's (1982:126) artifact classes differed in her study of material patterning.

The functional classes of artifacts under consideration here were adapted from those developed by South (1977) to illustrate the Carolina Artifact Pattern. Two major modifications have been necessary. First, because they usually appear in low frequencies, South's categories of clothing, tobacco, and toys all have been included in the class of personal possessions. The vast majority of artifacts in this class have in common the traits of small mass and high portability; thus, they have a high probability of loss (Schiffer 1977:23). Second, the kitchen functional class consistently appears in the highest frequencies. This class is comprised primarily of glass and ceramic artifacts. With few exceptions, ceramics and glass perform different functions; that is, ceramics are utilized primarily in food preparation and serving, while glass, with the exception of tableware, is utilized primarily for food and liquid containment and storage. We also have suggested previously that the two have different rates of deposition (Chapter 7), and that the glass\ceramic ratio varies chronologically. Therefore, for our initial analysis, the categories of glass and ceramics are considered separately.

Square 13, lot 13 was the only area investigated that produced all three depositional contexts. In addition, with the exceptions of remains from FS 428, all the proveniences selected for testing date from the Shorey occupation. This is important, since economic and social factors may influence disposal patterns.

The following sequence of experiments examines the nature of distributions of artifact functional classes for the three depositional contexts delineated above. As will be seen, a series of comparative tests involving different combinations both of artifact classes and of depositional contexts was undertaken before the nature of differences between the distributions could be elucidated. This procedure resulted

from a series of discoveries about the archeological record that resulted in large part from evaluation of the succeeding test results. Thus, even though several specific hypotheses were tested statistically, the results of those tests individually were less overwhelming than was the cumulative understanding gained during these experiments. While strict adherence to a hypothetico-deductive framework might have produced altogether different results, several factors precluded such an approach. The first was the aforecited lack of archeological specificity in the original research design that governed the nature of data recovery. The second was contamination of the samples due to post depositional disturbances. Finally, the object of this experimentation was pattern recognition, which ultimately is an inductive rather than a deductive process.

Initially, the test cases were divided according to context, and the frequency of each functional class was calculated. The chi-square test for k independent samples was used to test the null hypothesis that there is no significant difference in the artifact functional type distribution among these three depositional types. Table 31 shows the results of this test, and indicates that there is a significant difference.

Nevertheless, it was thought prior to this experiment that the privy and/or architectural feature associations contain more personal possession class artifacts than midden, since the latter comprises an area of purposeful dumping that may be expected to contain fewer lost artifacts. It also was anticipated that the midden areas would contain more ceramic and glass for similar reasons. Finally, it was expected that more architectural class artifacts would be associated with structural features. However, the differences observed between these contexts were not those originally anticipated. The midden areas yielded more personal possession than the other two areas, rather than the reverse. More ceramics than expected were present in the midden areas, although there was less glass. Frequencies of glass and ceramic sherds were reversed in the other two depositional contexts. Because glass and ceramic frequencies did not behave independently, chi-square was recalculated utilizing the single class of kitchen artifacts. Table 32 shows that the null hypothesis again cannot reasonably be rejected.

Tables 31 and 32 suggest that while the four artifact functional classes are represented in fairly equal proportions among the three depositional contexts, individual artifact types or subclasses within the larger classes may exhibit different distributions. This trend cannot be examined for most types within the artifact functional classes because of small sample sizes. Nevertheless, this was not the case for the frequently occurring glass and ceramic artifacts.

Subsequently, chi-square was computed for pairwise comparisons of depositional contexts in Square 13, Lot 13. Tables 33 - 35 indicate that artifact functional class distributions associated with privies and structural features did not vary significantly. However, remains associated with the midden are significantly different from the other two

TABLE 31. Chi-square test for significance between artifact functional class distributions from three depositional contexts in Square 13, Lot 13.

	Midden	Privy	Structural Features	
Ceramic	161 (127.0)	239 (254.1)	361 (379.9)	761
Glass	108 (146.6)	311 (293.1)	459 (438.3)	878
Architecture	14 (17.9)	40 (35.7)	53 (53.4)	107
Personal possessions	22 (12.2)	15 (24.4)	36 (36.4)	73
Activities	5 (6.3)	15 (12.7)	18 (19.0)	38
	310	620	927	N 1857

X^2 = 36.78, df=8, p<.001.

TABLE 32. Chi-square test for significance between artifact functional class distributions, including the "kitchen" class, from three archeological contexts in Square 13, Lot 13.

	Midden	Privy	Structural Features	
Kitchen	269 (273.6)	550 (547.2)	820 (818.2)	1649
Architecture	14 (17.9)	40 (35.7)	53 (53.4)	107
Personal possessions	22 (12.2)	15 (24.4)	36 (36.4)	73
Activities	5 (6.3)	15 (12.7)	18 (19.0)	38
	310	620	927	1857

X^2 = 13.55, df=8, p>.05.

TABLE 33. Chi-square test for significance between the distributions of artifact functional classes from two contexts in Square 13, Lot 13.

	Privy	Structural Features	
Ceramic	239 (240.5)	361 (359.5)	600
Glass	311 (308.6)	459 (461.4)	770
Architecture	40 (37.3)	53 (55.7)	93
Personal possession	15 (20.4)	36 (30.6)	51
Activities	15 (13.2)	18 (19.8)	31
	620	927	N 1547

$X^2 = 3.16$, df=4, $p>.05$.

TABLE 34. Chi-square test for significance between distributions of artifact functional classes from midden and structural feature contexts in Square 13, Lot 13.

	Midden	Structural Features	
Ceramic	161 (130.8)	361 (391.2)	522
Glass	108 (142.1)	459 (424.9)	567
Architecture	14 (16.8)	53 (50.2)	67
Personal possessions	22 (14.5)	36 (43.5)	58
Activities	5 (5.8)	18 (17.2)	23
	310	927	N 1237

$X^2 = 26.17$, df=4, $p<.001$.

TABLE 35. Chi-square test for significance between distributions of functional artifact classes from midden and privy contexts in Square 13, Lot 13.

	Midden	Privy	
Ceramic	161 (100.2)	239 (299.8)	400
Glass	108 (105.0)	311 (314.0)	419
Architecture	14 (13.5)	40 (40.5)	54
Personal possessions	22 (9.3)	15 (27.7)	37
Activities	5 (5.0)	15 (15.0)	20
	310	927	N 1237

$X^2 = 72.53$, df=4, p<.001.

TABLE 36. Chi-square test for significance between distributions of artifact functional classes from two contexts at the Church lot.

	Structural Features	Privy	
Ceramic	220 (140.5)	92 (171.5)	312
Glass	39 (132)	254 (161)	293
Architecture	74 (53.6)	45 (65.4)	119
Personal Possessions/Activities	3 (9.9)	19 (12.1)	22
	336	410	N 746

$X^2 = 223.95$, df=3, p<.001.

TABLE 37. Chi-square test for significance between artifact

contexts. In both cases, there is relatively less glass and more ceramics, and the midden also contained far more personal possessions than expected, especially when compared to the privy (Table 35).

Chi-square was calculated to determine if there were significant differences in the distributions of functional artifact classes among three different depositional types from Square 13, Lot 13. Only material recovered from midden areas varied significantly; there were more ceramics and personal possessions from this context, and less glass. To investigate whether this distribution was part of a larger pattern or if it was peculiar to Square 13, Lot 13, data from the Church lot was tested. The data used here derived from structural features and from a privy on the Church lot. Mean Ceramic Dates indicate that these materials were derived from the Guillaud occupation. Guillaud, a mortician and furniture maker, probably held middle-class status. It is very likely that he was more affluent than his working-class neighbor Shorey, since he is known to have speculated in real estate during the 1880s (Fritz and Reeves 1983). Also, the material remains from both the Guillaud and the previously described Shorey occupations date from approximately the same period. Based on the preceding tests, it was hypothesized that like the Shorey occupation, there would be no significant difference between functional class distributions from the Guillaud privy and structural features. To compensate for small sample sizes, personal possessions and activities categories were lumped. Table 36 shows that the Guillaud and structural features differ significantly in terms of their artifact distribution. Even when ceramics and glass are combined into the kitchen class, the difference still was significant ($X = 24.09$, $df=2$, $p<.001$). Differences in functional distributions between these two depositional types more closely approximated the original expectations outlined above. First, more architectural artifacts were associated with the structural features than with the privy. Second, there were a large number of personal possessions in the privy fill. The majority of these were buttons, confirming the expectation pertaining to the distribution of lost items. Finally, the two contexts varied in the respective proportions of ceramics and glass: the privy contained far more glass and far fewer ceramics than did the structural features. This is the one similarity between the artifact distributions of the privies in lot 13 and the church lot; both contained more glass than ceramics. Similarly, two of the three privies excavated at the New Orleans General Hospital site contained more glass than ceramics (Goodwin and Yakubik 1982). This suggests that in urban contexts, bottles and other glass comprise the majority refuse type disposed in privies.

Functional class distributions from the Shorey and Guillaud occupations privies were examined next. As seen in Table 37, artifact class distributions from the Shorey and the Guillaud privies were found to differ significantly. The Guillaud privy had more glass, architectural, and personal artifacts than expected, and it had fewer ceramics. Similarly,

TABLE 37. Chi-square test for significance between artifact functional class distributions for the Shorey and Guillaud privies.

	Shorey Privy	Guillaud Privy	
Ceramic	239 (197.3)	92 (133.7)	331
Glass	311 (336.8)	254 (228.2)	565
Architecture	40 (50.7)	45 (34.3)	85
Personal Possessions	15 (20.3)	19 (13.7)	34
	605	410	N 1015

$X^2 = 35.74$, df=3, p<.001.

TABLE 38. Chi-square test for significance between artifact functional class distributions associated with the Shorey and Guillaud structural features.

	Shorey Structural Features	Guillaud Structural Features	
Ceramics	361 (426.4)	220 (154.6)	581
Glass	459 (365.5)	39 (132.5)	498
Architecture	53 (93.2)	74 (33.8)	127
Personal Possessions	36 (27.9)	2 (10.1)	38
Activities 19	18 (13.9)	1 (5.1)	
	927	336	N 1263

$X^2 = 206.10$, df=4, p<.001.

a significant difference was found between artifact class distributions associated with the Shorey and Guillaud structural features. Table 38 shows that there are less glass, personal, and activity artifacts from the Guillaud occupation than expected, as well as more ceramics and architectural artifacts.

The high frequency of architectural remains in the Guillaud house features may be explained by site formation and destruction processes, and no doubt derived from the destruction of the church and clerical residence there. However, the differences in the frequencies of the remainder of the artifact classes do not exhibit any readily explainable pattern.

Previous investigations at the New Orleans General Hospital Site (16 OR 69) and at the Elmwood Site (16 JE 138) have demonstrated that artifact functional class frequencies can be utilized in the recognition of changes in depositional, and by extrapolation, behavioral patterns as reflected in the different components of archeological sites (Goodwin and Yakubik 1982a; Goodwin, Yakubik and Goodwin 1983). As noted previously, material from the Church Lot was derived from the church occupation (1849-1872) and from the Guillaud occupation (1883-1895). It was hypothesized that archeological manifestations of the former would be very different from the residential-commercial Guillaud refuse. Religious items are carefully curated, and not likely to be discarded as refuse. While lost items should be expected in church associations, it might be expected, nevertheless, that there would be few of these. However, a clerical residence should produce the same habitation refuse as any other dwelling. Chi-Square was calculated to determine if there was a significant difference between artifact class frequencies from the church and from the Guillaud occupations on Square 13, Church Lot. Activities class artifacts were left out of this calculation, since none could be associated with the church occupation.

Table 39 shows a significant difference beyond the .001 level between the two samples. The artifacts associated with the Guillaud occupation had higher frequencies of architecture and personal artifacts. This probably reflects both the destruction of the church and of the clerical residence and the substantial building undertaken by Guillaud. The higher frequency of personal possessions is indicative of Guillaud's affluence. The high frequency of kitchen items associated with the church occupation does not suggest more kitchen activity; rather, it reflects the low occurrence of the other artifact classes.

These data seem to corroborate a documentary record indicative of Guillaud's affluent status. It also may be hypothesized that Guillaud, a professional, held higher status than his neighbor Shorey, a laborer, and that this status differential would be reflected archeologically. One indicator of status may be found in the comparative evaluation of ceramic values. Miller (1980) investigated prices of various types of nineteenth century ceramics, and found four pricing modalities. While Miller utilized pricing data to develop an

TABLE 39. Chi-square test for significance between artifact functional class distributions associated with the Church and Guillaud occupations on the Church Lot.

	Church	Guillaud	
Kitchen	260 (237.6)	605 (627.4)	865
Architecture	22 (38.7)	119 (102.3)	141
Personal Possessions	10 (15.7)	47 (41.3)	57
	292	771	N 1063

$X^2 = 15.70$, df=2, $p<.001$.

TABLE 40. Chi-square test for significance between ceramic price levels for the Shorey and Guillaud occupations.

	1	2 and 3	4	
Shorey	192 (161.4)	47 (42.2)	386 (421.4)	625
Guillaud	49 (79.6)	16 (20.8)	243 (207.6)	308
	241	63	629	N 933

$X^2 = 28.23$, df=2, $p<.001$.

interval scale of value, price levels have been utilized here for the purpose of ranking components relatively. The first, or lowest price level comprised undecorated ceramic types, excluding ironstone. The second level comprised ceramics with minimal decoration, including annular ware, mocha wares and shell-edged decoration. The third level consisted of hand-painted wares, and the fourth and highest priced level was comprised of transfer-printed wares and ironstone. Porcelain was not included in this economic scale (Miller 1980:3-4), and thus, has not been utilized here. Using Miller's categories, the ceramic samples from the Shorey and Guillaud occupations were divided, and frequencies were calculated. Because of low frequencies of price level three, levels two and three were collapsed. Chi-Square was calculated, and the differences in the ceramic price levels between the two occupations was found to be significant beyond the .001 level (Table 40). The Guillaud occupation had more of the highest price level ceramics than the Shorey occupation, while the latter had more of the lowest price level artifacts. This result is consistent with the hypothesis that Guillaud's greater wealth and higher status would be observable archeologically.

Data from well-documented occupations also can be used to characterize components inadequately described in the historic record. For example, the earlier component on Square 13, Lot 13 represented the remains from a rental residence. It was hypothesized that this component would exhibit remains indicative of lower status than those from the Shorey occupation. Because the data from the earlier component was recovered during backhoe stripping, it was tested against data from the Shorey component that were recovered under similar conditions. Chi-Square was calculated, and the two samples were found to differ significantly (Table 41). These data support the hypothesis that Shorey held higher status than the tenant occupant of Robelot's cottage; the former had more of the highest price level ceramics than the latter.

Another indicator of wealth or status may be found in artifact class frequencies. Lower status components tend to exhibit lower frequencies of personal artifacts (Goodwin and Yakubik 1982a). Frequencies of the artifact classes were calculated for the Shorey and tenant occupations, and chi-square was calculated (Table 42). In this case, however, it was not possible to reject the null hypothesis of no difference.

Finally, use of relict ceramic types may indicate low status occupation. In an effort to identify cases of relict ceramic utilization, Mean Ceramic Dates were compared to bracketed glass dates from both components on Square 13, Lot 13 (Table 29). This comparison failed to indicate relict ceramic usage in either component, in all cases where the proveniences contained adequate sample sizes.

Although the ceramic price level comparison between the Shorey and the tenant components of Square 13, Lot 13 indicated that Shorey may have been more affluent, comparison of artifact functional class frequencies, MCDs, and bracketed glass dates failed to provide corroborative results. Thus, it appears that

TABLE 41. Chi-square test for significance between the ceramic price levels from the Shorey and tenant components on Square 13, Lot 13.

	1	2	3	4		
Shorey	159 (166.1)	32 (56.3)	2 (2.9)	279 (246.7)		476
Tenant	74 (66.9)	47 (22.7)	2 (1.1)	67 (99.3)		190
	233	79	4	346	N	662

$X^2 = 53.31$, df=3, $p<.001$.

TABLE 42. Chi-square test for significance between the artifact class frequencies from the Shorey and tenant components on Square 13, Lot 13.

	Shorey	Tenant		
Ceramic	567 (579.3)	175 (162.7)		742
Glass	256 (248.3)	62 (69.7)		318
Architecture	32 (29.6)	6 (8.3)		38
Personal Possession	29 (26.5)	5 (7.5)		34
Activities	6 (6.2)	2 (1.8)		8
	890	250	N	1140

$X^2 = 4.21$, df=4, $p>.05$.

Shorey's status was similar, or only slightly higher than that of the tenant.

Two components from the area of Excavation Unit 1 in Square 21 also were probably tenant occupations. Since Peter M rcy's house was located elsewhere on the square. It is likely that a shipbuilder or other laborers in Marcy's employ resided in the Excavation Unit 1 area. If these two components were from rental occupations, these "early" and "late" Square 21 components should have comparable status indicators to each other and to the tenant occupation from Square 13, Lot 13 previously discussed. To test this hypothesis, the ceramic price level frequencies from the Square 13, Lot 13, tenant occupation and from the early Square 21 occupation were calculated, and the distributions compared using Chi-square. Table 43 shows that these components did not differ significantly. Artifact functional class frequency distributions for these two components also were similar. Table 44 shows a significant difference using Chi-square. Examination of Table 44 reveals that the major difference between the two samples is that the Early Square 21 sample has a greater that expected frequency of architectural remains. Many materials used in house construction also are utilized in ship construction, and shipbuilding activity on Square 21 may have skewed the frequency of architectural remains. When the architectural artifacts are removed and chi-square is recalculated, no significant difference is observed between the two samples (Table 45).

Finally, comparison of MCDs and bracketed glass dates for the early components of Square 21 and Square 13, Lot 13, does not indicate any relict ceramic usage for either occupation (Table 29). These data, then, support the hypothesis that these were similar tenant-residential occupations with inhabitants of similar socio-economic status.

It was hypothesized that the later component from Square 21 also was a tenant-residential occupation; therefore, artifact functional class distributions and ceramic price level frequencies for this component should be similar to those found for the early Square 21 occupation. Unfortunately, these cannot be compared, because chronological differences in glass use during the nineteenth century strongly effects the frequency of the kitchen functional group. However, ceramic price level frequencies for these components may be compared (Table 46). The Chi-Square test indicates that there is a significant difference between the two samples. Examination of Table 46, however, reveals that while frequencies of highest priced ceramics conform to expected frequencies, differences between the components occur primarily between the two lowest priced categories. The late Square 21 component had more of the lowest priced ceramics than the early component, while the latter had more of the second price level ceramics. This difference is not particularly dramatic. Because MCDs for the later component on Square 21 range from 1865 to 1877, the slight difference in the cost of ceramics evidenced by the two components may be explained as a result of the financial hardships suffered after the War

TABLE 43. Chi-square test for significance between ceramic price levels for the early Square 21 and early Square 13, Lot 13 occupations.

	1	2	3	4		
Early Square 21	80 (81.4)	50 (51.3)	5 (3.7)	78 (76.6)		213
Early Square 13, Lot 13	74 (72.6)	47 (45.7)	2 (3.3)	67 (68.4)		190
	154	97	7	145	N	403

$X^2 = 1.14$, df=3, $p>.05$.

TABLE 44. Chi-square test for significance between artifact class frequencies for the early Square 21 and early Square 13, Lot 13 Occupations.

	Early Square 21	Early Square 13 Lot 13		
Ceramic	223 (240.1)	175 (157.9)		398
Glass	82 (86.9)	62 (57.1)		144
Architecture	58 (38.6)	6 (25.4)		64
Personal Possessions	11 (9.7)	5 (6.3)		16
Activities	6 (4.8)	2 (3.2)		8
	380	250	N	630

$X^2 = 29.53$, df=4, $p<.001$.

TABLE 45. Chi-square test for significance between artifact class frequencies without the architecture class for the early Square 21 and early Square 13, Lot 13 occupation.

	Early Square 21	Early Square 13 Lot 13	
Ceramic	223 (240.1)	175 (171.6)	398
Glass	82 (86.9)	62 (62.1)	144
Personal Possessions	11 (9.1)	5 (6.9)	16
Activities	6 (4.6)	2 (3.4)	8
	322	244	N 566

$X^2 = 2.18$, df=3, $p>.05$.

TABLE 46. Chi-square test for significance between ceramic price level frequencies from early and late components on Square 21.

	1	2	3	4	
Early Square 21	80 (110.7)	50 (22.5)	5 (1.3)	78 (78.4)	213
Late Square 21	431 (400.3)	54 (81.5)	1 (4.7)	284 (283.6)	770
	511	104	6	362	N 983

$X^2 = 58.81$, df=3, $p<.001$.

Between the States.

Examination and comparison of Mean Ceramic Dates and bracketed glass dates from the early and the late components of Square 21 indicates relict ceramic usage in each. There were more cases of relict ceramic usage in the later component. This also may reflect post-bellum economic difficulties.

The foregoing analyses have served to provide information on the nature of archeological remains collected during data recovery at Algiers Point. They also have elucidated depositional patterns illustrative of site formation processes and of refuse disposal behaviors. Similarly, these experiments elucidated site destruction and perturbation processes active post depositionally. They also provided information on a variety of research topics, ranging from socioeconomic patterns and trends to relict use of ceramics. Statistical comparisons also sought to clarify the nature of nineteenth century archeological features, using a functional classification with behavioral correlates. Finally, known and dated contexts characterized quantitatively were used in attempts to identify unknown features lacking archival explanation. A provenience guide to field specimen inventory of archeological remains from Algiers Point is contained in Appendix 1. Inventory and classification of the material culture of Algiers Point is shown in Appendix 2, Tables 13-18, 20, 24-27.

CHAPTER IX

DISCUSSION AND SUMMARY

As the preceding chapters of this report illustrate, archeological data recovery at Algiers Point produced substantial historic and archeological information about nineteenth and early twentieth century occupation of the project area. In the final analysis, however, both the prosecution and the results of this research effort were somewhat uneven. In particular, a number of the broad research objectives outlined in Table 2 (page 42), formulated as part of the data recovery plan, were difficult to fulfill. Rather, a series of inductively generated experiments were undertaken using the Algiers Point data base; in general, these experiments were designed to permit pattern recognition pertaining to land use, status differentials, and construction sequences in the project area.

Although this series of experiments (see Tables 31-46) made use of archival and background historic data assembled by previous investigators (Scrattish 1982; Fritz and Reeves 1983), clearly the experimentation described in detail above focused on and made more substantial use of material data from the various excavations. In addition, these experiments relied on archeological constructs, such as functional classes and ceramic price levels. Thus, they have elucidated behavioral and economic patterns that are largely undescribed in the archival record. These results, then, are rather more archeological than historical.

There are three primary reasons for this lack of fit between the historical data base and the archeological analyses that were undertaken. One of these was simply inadequate problem formulation at the outset of the project. As Table 2 (page 42) indicates, research objectives outlined by former New Orleans District personnel for the Memorandum of Agreement mixed, matched, and confused the various levels of archeological inquiry. Objectives 4, 5, 7, and 8 (Table 2) in reality only presented a "wish list" of the kinds of data it was hoped would be recovered during excavation. These four objectives, then, constituted inductive expectations on the nature of remains. They did not provide nor were they used to generate either explanatory hypotheses or models of economic or social change for the periods in question. Research objectives 1 and 2 (Table 2) involved the extrapolation of historical patterns from the data base. Research objective 6 presumed the collection of pattern-specific data, in order to address processes of cultural change and maintenance. In all of these cases, however, little or no attention was given in the field to problem or data base specific excavation methodologies that would have enabled resolution of processual issues, or even reliable reconstruction of cultural patterns. All of the foregoing research objectives, then, were framed inadequately, and lacked recognition of the nature and use of problem orientation in archeological research.

Because of this major shortcoming in the New Orleans District's original data recovery plan, it may be helpful to review briefly the hierarchical levels of archeological interpretation.

This discussion draws heavily on a series of discussions and correspondences between the Principal Investigator for this project and Dr. Irving Rouse, and on a graduate seminar held by Dr. Rouse in 1976 at Yale University. For a more detailed discussion, the reader is referred to Rouse 1977. The primary level of interpretation involves inferences about the nature and context of archeological remains. The nature of the remains is observed primarily through their classification. In this manner, patterns that result usually consist of classes, types, or modes which, in turn, may elucidate processes of construction or manufacture. The context of the remains, viewed during site survey or excavation, is visible in patterns identified as components, subassemblages, or assemblages. Processes revealed on this level of inquiry are site formation, disturbance, and destruction.

On the secondary level of interpretation, inferences are made about the people who produced the remains, or about their identity or changes in their assemblages. Classification and dating of assemblages, and study of their distributions, reveals patterns known as complexes, styles, periods, or phases. Processes elucidated during secondary inquiry include temporal or spatial differentiation in technology or style, or related processes such as invention, diffusion, or migration.

The third level of archeological inquiry focuses on behavioral systems; on the reconstruction of cultures and social structures; and, on the dating of elements of settlement patterns. Patterns observed during tertiary interpretation include settlement and subsistence patterns, and patterns of variation or co-variation in elements of the systems under study.

The quaternary level of interpretation involves the search for principles or laws of cultural change. The procedure of inquiry is experimentation to test hypotheses derived from explicit problems or models. Processes observed in this manner include adaptation, demographic change, dialectical conflict, and covariation in cultural and social traits.

These four levels of archeological inquiry are logically successive. The primary task is study of the remains; the secondary task is study of the cultural group that produced the remains, using distinctive structures and artifacts, considered primarily in terms of their technological and stylistic attributes. On the tertiary level, behavioral systems come into focus, so that changes in them can be measured and studied. During tertiary study, structures and artifacts are viewed primarily from a functional or economic point of view that includes study of the venue of their use. On a quaternary level, models of change or process are tested against the archeological record, within the framework of the hypothetico-deductive method.

In a data recovery project, such as that at Algiers Point, both the nature and context of the remains (primary level), and the classification and dating of the assemblages (secondary level) should be undertaken and documented in such a manner that the data are preserved for the sake of posterity. Tertiary inferences about behavioral systems, and higher order generalizations about cultural change and processes, require specialized data bases, and analytical procedures tailored to the resolution of specific

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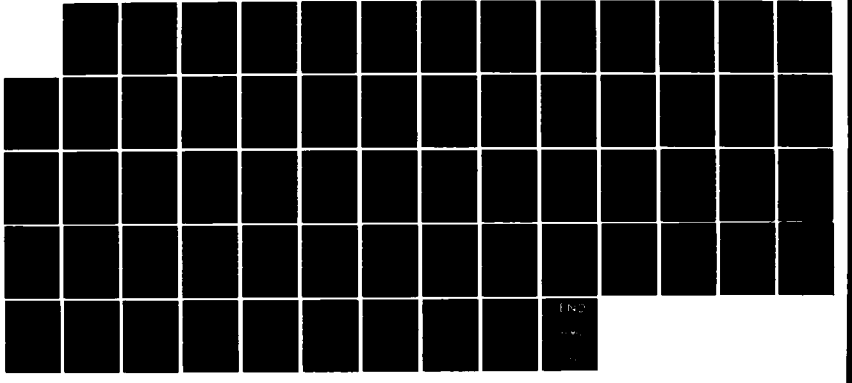

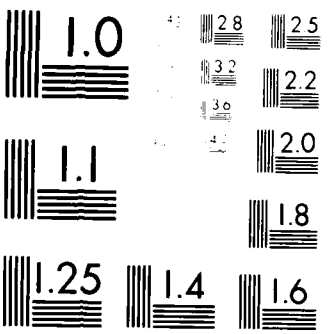

problems.

From this perspective, then, research objectives 4,5,7, and 8 (Table 2, page 42) that were delineated for this project comprised a basic or primary set of expectations about the nature of remains expected to be recovered at Algiers Point. As this report has shown, objectives 5, 7, and 8 largely were unfulfilled. Objective 4, an "attempt to locate undisturbed" contexts, is a rudimentary expectation, even at the primary level.

Research objectives 1 and 2 were secondary level problems derived from historical data. Besides lacking conceptual clarity, the pursuit of these two objectives also illustrated the two other primary reasons for the aforementioned lack of fit between the historical data base and the archeological data presented here. The expectations outlined in objectives 1 and 2 (Table 2) were founded in the direct historical approach, using two histories developed for the Algiers Point project area (Scrattish 1982; Fritz and Reeves 1983). The former report lumped the nearly 140 years of urban and industrial growth on Algiers Point into one macro developmental period. The latter report failed to provide substantial information on Square 10, and, for Square 21, the historic record (Fritz and Reeves 1983) lacked the specificity requisite to spatial reconstructions. Since additional archeologically relevant historical research was outside the scope of work for this project, the applicability of the direct historical approach to the resolution of objectives 1 and 2 was limited.

Another problem that encumbered both secondary (objectives 1 and 2) and tertiary (objective 6) level inquiry was the lack of appropriate field methodologies that would have enabled archeological reconstruction of the appropriate patterns and processes. Multi component late nineteenth and early twentieth century urban sites are very complex, and secondary and tertiary reconstruction are contingent upon recognition of the nature and context of the remains at the primary level. The original NOD crew had substantial methodological problems at the primary level, a situation compounded by poor recordation techniques.

The Algiers Point Data Recovery Project, then, has suffered from inadequate problem formulation, an inappropriate level of historical documentation, and from a temporary breakdown in primary level archeological interpretation. These factors, along with the overall lack of continuity of the project, led us to focus our efforts on primary level documentation of the nature and context of the remains, and on secondary inferences about the people who made the remains, using the procedures of classification and dating of the assemblages. Tertiary level inferences about the nature of and changes in behavioral systems were undertaken using standard techniques of archeological experimentation, rather than the direct historical approach per se. Higher order generalizations were precluded altogether by the absence of a bona fide research design that guided all subsequent phases of work.

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APPENDIX I

VERTEBRATE FAUNA FROM ALGIERS POINT

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INTRODUCTION

Until recently, very few vertebrate samples had been examined from historic urban locations. In the past few years, a number of collections from such sites have been examined. Most of these have been from Savannah and Charleston on the Atlantic coast, but a few collections have been examined from the New Orleans area, as well. In some respects, analysis of such materials has served to reinforce opinions of eighteenth and nineteenth subsistence obtained from other sources of information. In other respects, however, these studies have brought interesting aspects of historic subsistence strategies to our attention. For example, the importance of local factors in the development of specific subsistence strategies has become apparent. The South cannot be considered a uniform "Kingdom of Porkdom." Differences between rural and urban strategies also are becoming apparent. Rural households appear generally to have consumed more wild food animals, perhaps due to requirements for self-reliance of their isolated locations. Urban diets, however, are less diverse in terms of wild foods consumed, depending instead upon domestic livestock, primarily beef, pork, poultry, goat, and mutton.

As noted previously, Algiers Point initially was settled in 1718 by French colonists. Although the colonial period began with French settlement of New Orleans, it continued into the Spanish occupation of the city after1769, and did not conclude until the Louisiana Purchase. The second period began in 1805 when the property was purchased by Barthelemy Duverje. The second period was one of settlement and urbanization in the area, which ended with subdivision of the Duverje Plantation in 1839. During the Duverje family's ownership, a plantation home was constructed on the property. This house burned in the Great Algiers Point Fire of 1895. Duverje not only operated an agricultural enterprise on the land, but also a brickyard and several slaughter houses. Land also was rented along the river to dry dock companies. The third period was one of intensified urbanization and industrialization, as the area was subdivided into residential, commercial, and industrial properties. The residential lots were occupied by working class European immigrants. The dry docks continued to operate as did a major railroad complex. This period of urbanization continues into the present time, although the area no longer is an active industrial area and no residential structures remain in the project area.

Five areas were selected for excavation and faunal identification. These were Square 13, Lot 13, and the "Church" Lot; Square 10, Lots 6 and 8; and, Square 21. Square 13, Lots 1 and 2, was excavated because of the presence there of Wharton's Coffee House or Tavern between 1851 and 1868. Square 13, Lot 13, was of interest because of its history of residential occupations dating from the antebellum period until the mid twentieth century. A single house and several outbuildings were thought to have occupied the lot until 1937. Square 13, the "Church" Lot, was studied because of interest in religious activity in the area, as well as in commercial-residential activities. St. Bartholomew's Roman Catholic Church occupied this lot from 1849 until 1872.

This lot subsequently was used by undertakers who also made furniture and lived on the property. In 1910, it became the property of Johnson Iron Works. Square 10, Lots 6 and 8, were of interest due to their association with blacksmith shops. These lots also were used for residences. Square 21 was tested in order to provide information on the industrial Johnson Iron Works occupation, as well as information on a lumber mill and Confederate shipyard. There appears to have been some residential activity in Square 21, as well. The faunal materials from these areas, therefore, represent subsistence remains from an eighteenth century plantation, as well as nineteenth and twentieth century residential and commercial working class activity areas.

ZOOARCHAEOLOGICAL MATERIALS AND METHODS

Vertebrate materials described herein were excavated in Fall, of 1983, by the U. S. Army Corps of Engineers, New Orleans District, and in Spring, 1984, by R. Christopher Goodwin and Associates, Inc. of New Orleans, under contract with the Department of the Army, New Orleans District, Corps of Engineers. Although some of the materials could be assigned to specific time periods, many could not. All materials could be summarized as deriving from either a pre-1850 or a post-1850 context.

The vertebrate faunal collection was examined using standard zooarchaeological methods. Remains were identified by Marc Frank and Barbara Ruff, using the comparative skeletal collection of the Zooarchaeology Laboratory, Department of Anthropology, University of Georgia. Carter Vest assisted with the washing and weighing of materials. Bones of all taxa were weighed and counted, in order to determine relative abundance of the species identified. Bone modifications were recorded, and the elements were identified in order to discuss butchering techniques. Sawed and hacked bones identified to species were illustrated. The Minimum Number of Individuals (MNI) were determined using paired elements and age. MNI is based upon the observation that most animals are symmetrical. They have only one left humerus, for example. If there are two left humerii in the faunal collection, then there must have been two animals present. MNI is a standard measure of abundance in zooarchaeological analysis. In calculating MNI, the field specimens associated with each temporal and spatial component were analyzed as separate observations. These temporal and spatial components included Square 13, Church Lot; Square 21; Square 13, Lot 13; Square 10, Lot 6; and Square 10, Lot 8. All units with the exception of the Church Lot, were divided into early (pre-1850) and late (post-1850) components.

Although MNI is the standard zooarchaeological quantification medium, the measure has several problems. MNI is an index which emphasizes small species over large ones. A faunal collection may have 10 individual chickens and only one cow, based on MNI. It seems unlikely that the chickens contributed more meat than did the cow. Further, MNI is based upon the assumption that the entire animal was utilized at the site. This ignores trade, and the possibility that no live animals were kept at the site. It is probable that all of the bones recovered from Algiers Point were

from salted, smoked, or freshly butchered meat.

In addition to MNI, bone count, and bone weight, an estimate of biomass provides information on the quantity of meat supplied by the identified species. In some cases, the original live weight of the animal also can be estimated. The predictions are based upon the allometric principle that the proportions of body mass, skeletal mass, and skeletal dimensions change with increasing size. This scale effect results from a need to compensate for weakness in the basic structural materials, in this case, bone. The relationship between body weight and skeletal weight is described by the allometric equation Y=ax[b] (Simpson et al. 1960:397). Many biological phenomena show allometry in accordance with this law (Gould 1971). In this equation, x is the skeletal weight or a linear dimension of the bones, y is the quantity of meat or the total live weight, b is the constant of allometry (the slope of the line), and a is the y-intercept for a log-log plot using the method of least squares regression and the beat fit line (Casteel 1978; Wing and Brown 1979; Reitz 1982; Reitz and Cordier 1983). A given quantity of bone or a specific skeletal dimension represents a predictable amount of tissue due to the effects of allometric growth. Values for a and b are obtained from calculations based upon data at the Florida State Museum, University of Florida, and the Zooarchaeology Laboratory, University of Georgia. The allometry formulae used here are presented in Table 47.

Both MNI and biomass calculations are subject to sample size bias. In samples of less than 200 individuals or 1400 bones, the sample is undoubtedly too small for reliable interpretations (Grayson 1979, 1981; Wing and Brown 1979). With small samples, the species list is too short, and the abundance of one species in relationship to others is probably somewhat inaccurate. It is not possible to determine the nature or extent of the bias, or to correct for it, until the sample is made larger through additional work.

The age of the species identified was estimated by observing the degree of epiphyseal fusion for selected elements. When animals are young, their bones are not fully formed. Along the area of growth, the shaft and the end of the bone, or epiphysis, are not fused. When growth is complete, the shaft and epiphysis fuse. Elements fuse in a regular temporal sequence (Silver 1963; Schmid 1972; Gilbert 1980), although environmental factors influence the actual age at which fusion is complete. Fusion rates can be grouped into four general categories. Bones identified were noted as either fused or unfused in the age category where fusion normally occurs. This is most successful for unfused bones which fuse in the first year or so of life, and for fused bones which complete growth at three or four years of age. Intermediate bones are more difficult to interpret. An element which fuses before or at 18 months of age and which is found fused archaeologically, could be from an animal which died immediately after fusion was complete or many years later. The ambiguity inherent in age groupings is reduced somewhat by recording each element under the oldest category possible. Although this method has drawbacks, it does provide a rough indication of husbandry techniques. For

Table 47. Allometric Formulae.

Taxa	N	Log a	Slope (b)	r^2
Mammal	97	1.12	0.90	0.94
Bird	307	1.04	0.91	0.97
Turtle	26	0.51	0.67	0.55
Osteichthyes	393	0.90	0.81	0.80
Siluriformes	36	1.15	0.95	0.87
Sparidae	22	0.96	0.92	0.98

instance, the presence of very old cattle or sheep may indicate dairy or wool industries, while mostly young animals may suggest use of animals primarily for meat, or even for veal.

As a further step in analysis, the species identified were summarized into faunal categories. Domestic mammals include pig (Sus scrofa), cattle (Ovis aries) and goats (Capra hircus). Domestic birds include chickens (Gallus gallus) and rock dove (Columba livia). These birds, like the domestic mammals, are not native to North America and were introduced here after European contact. The rock dove has since become feral. It is assumed that at this early date most doves were domesticated. Wild birds include the Canada goose (Branta canadensis) and turkey (Meleagris gallopavo). Both the Canada goose and the turkey are native North American birds which were found wild by early colonists. Eventually, both birds were domesticated. By the mid-1800s, there were standards of excellence for both as poulty breeds (Johnson and Brown 1903). The specimens examined from Algiers Point did not evidence the types of morphological changes associated with domestication, and are therefore assumed to have been wild rather than domestic. The bullfrog (Rana catesbiana) may or may not have been consumed. Given that bullfrogs are part of the traditional cuisine in the bayou region, this animal may well have been a food item. Estuarine resources included the channel catfish (Ictalurus punctatus) and sheepshead (Archosargus probatocephalus). The catfish is a freshwater species which may be found in brackish waters, while the sheepshead is a marine species which can tolerate low levels of salinity. Commensal species include taxa which probably were not food sources, such as rats (Rattus norvegicus and Rattus rattus), dogs (Canis familiaris), and cats (Felis domesticus). While these animals could have been used for food, there is no evidence on the bones which would suggest that. In fact, one of the dogs had been given a formal burial.

RESULTS

The sample from Algiers Point appears to be an adequate one. A total of 142 individuals were identified in a sample of 3493 bones. The identified and analyzed material represents the range of diversity, distribution, and modification of the Algiers Point vertebrate fauna. Unfortunately, the samples from each of the analytical units were too small to warrant intersite comparisons.

Bone preservation at Algiers Point was generally excellent. This state of preservation is reflected in the unusually small category of unidentified bone (Table 48). As a rule, this category is a sizeable one in archaeological faunas from historic sites. The unidentified artiodactyl category is large. In part, this is due to the fact that artiodactyls made up the bulk of the sample, but an additional factor was the manner of sawing bones, which is discussed below. Some of the larger bones suffered damage to the cortex (the dense, exterior layers), resulting in a progressive spalling off of this layer. This process removes many of the clues, such as evidence of muscle attachment and nutrient foramina needed for identification of a given element. Repeated

Table 48. Algiers Point Species List.

	CT.	MNI* #	MNI* %	Wt. gms	Biomass kg	Biomass %
UD Mammal	707			429.59	8.25	2.17
UD large mammal	3			19.90	0.41	0.11
UD small mammal	1			4.60	0.10	0.03
Didelphis virginiana Opossum	1	1	0.70	2.70	0.06	0.01
Sylvilagus floridanus Eastern Cottontail	4	1	0.70	2.10	0.05	0.01
Sylvilagus cf. *floridanus*	1	1	0.70	1.08	0.03	0.01
Sylvilagus aquaticus Swamp rabbit	1	1	0.70	1.20	0.03	0.01
Sylvilagus cf. *aquaticus*	1	1	0.70	2.82	0.07	0.02
Rattus rattus Black Rat	3	1	0.70	0.39	0.01	0.003
Rattus norvegicus Brown Rat	3	2	2.10	1.36	0.03	0.01
cf. *Rattus norvegicus*	1			0.60	0.02	0.005
Canis familiaris Domestic Dog	130	2	1.41	314.89	4.66	1.23
Procyon lotor Raccoon	1	1	0.70	1.30	0.03	0.01
Felis domestica House Cat	1	1	0.70	4.40	0.10	0.03
UD Artiodactyl	1147			3551.45	48.21	12.69
Sus scrofa Pig	315	29	20.42	4540.74	59.29	15.61
Odocoileus virginianus White-tailed Deer	9	5	3.52	78.22	1.44	0.38
cf. *Odocoileus virginianus*	1			5.24	0.12	0.03
Bos taurus Cow	753	36	25.35	20503.99	237.63	0.03
Ovis aries Sheep	8	2	1.41	78.23	1.44	0.38
Caprine Sheep/Goat	77	12	8.45	884.21	13.73	3.80
UD Bird	114			44.66	0.75	0.20
Ardea herodias Great Blue Heron	3	1	0.70	6.80	0.12	0.03
Egretta thula Snowy Egret	1	1	0.70	1.44	0.03	0.01
Anser albifrons Greater White-fronted Goose	2	1	0.70	6.5	0.11	0.03
cf. *Anser albifrons*	1	1	0.70	2.77	0.05	0.01

Table 48, continued.

	CT.	MNI* #	MNI* %	Wt. gms	Biomass kg	Biomass %
Branta canadensis Canada Goose	1	1	0.70	0.92	0.02	0.005
cf. Branta canadensis	1			1.46	0.03	0.01
Anas platyrhynchos Mallard	1	1	0.70	0.95	0.02	0.005
Buteo lineatus Red-shouldered Hawk	1	1	0.70	2.3	0.04	0.01
Gallus gallus Chicken	163	27	19.01	203.51	2.91	0.77
cf. Gallus gallus	2			0.72	0.01	0.003
Meleagris gallopavo Turkey	16	4	2.82	45.16	0.69	0.18
Columba livia Rock Dove (Pigeon)	5	1	0.70	2.20	0.04	0.01
UD Turtle	1	1	0.70	3.70	0.08	0.02
Rana catesbiana Bullfrog	1	1	0.70	0.55		
UD Fish	9			3.74	0.12	0.03
Ictaluridae Catfish	2	2	1.41	1.6	0.03	0.01
Ictalurus punctatus Channel Catfish	1	1	0.70	4.29	0.08	0.02
Archosargus probatocephalus Sheepshead	1	1	0.70	0.81	0.01	0.003
UD Bone				1.14	0.03	0.01
Total	3493	142	99.90	30,764.23	380.88	34.09

* Minimum Number of Individuals

fluctuations of the water table can induce such an effect. A further bit of evidence for the generally fine state of preservation at Algiers Point is the survival, in an identifiable state, of many bird elements. The processes of burial and excavation of avian bone often results in unidentifiable fragments.

Results of the identification and analysis of fauna from Algiers Point are presented in Table 48. The MNI and biomass data for the individual lots as well as for Algiers Point as a whole are summarized according to broad faunal categories in Tables 49 and 50. The majority of the individuals and the biomass were contributed by domestic mammals. Cows were more abundant than pigs in the collection, and both were more common than caprines. Caprines were, however, a significant part of the faunal assemblage. Wild mammals also were found in the collection in substantial numbers, although only deer were common. A wide range of wild mammals were identified. Similarly, a variety of wild birds were identified, although the dietary contributions of these two groups were minimal. Chickens, however, were abundant in the collection. The number of chickens found in the collection almost equalled that of pigs, although the dietary contribution of chickens was substantially less than pork. A single bullfrog was identified and a single turtle. The turtle was probably a freshwater species rather than a sea turtle, but it could not be identified further. Two fish were identified: channel catfish and sheepshead. Fish were identified from both time periods and from four different contexts.

Distribution of elements from Algiers Point are tabulated in Table 51. In this table, head elements include teeth, maxilla and mandible fragments; forequarters include the scapula, humerus, radius, and ulna; forefeet include metacarpals and carpals; hindquarters include the sacrum, femur, patella, and tibia; hindfeet include the metatarsal and tarsals; and "feet" includes those bones which could not be assigned to one of the other foot categories. "Feet" bones are primarily phalanges and distal metapodials not otherwise identifiable. Ribs and vertebrae are tabulated in separate columns. Analysis of these data suggests that while all sections of the beef and pork carcass are represented in the sample, the largest percentage of bones are from meaty portions. Cranial elements including mandible and maxilla fragments with teeth were identified from all the artiodactyls except deer. The category which includes general feet elements includes few elements except for pigs. Pigs were identified from a number of feet elements. For both beef and pork, forequarters appear to have been utilized to greater extent than hindquarters. Almost 37% of the element distribution for pigs is represented by forequarters. In the venison category, hindquarters were somewhat more abundant than forequarters. No cranial fragments and only one foot fragment were identified as deer. One dog burial was found. This was an adult, medium-sized animal. The skeleton was complete except that a few rib, vertebrae fragments, and incisors are missing. The dog burial was found in Level 1 of Unit 1, Square 21. It is worth noting the level of this burial, since it is possible that it was buried more recently than the fragmentary

Table 49. Summary of MNI Distribution in Major Analytical Units.

Analytical Unit	Domestic Mammal	Wild Mammal	Domestic Bird	Wild Bird	Turtle	Amphibian	Fish	Commensal Species	Total
Sq. 13, Church lot	5	1	3	2	0	0	0	0	11
Sq. 13, lot 13-early	6	1	3	0	0	0	1	0	11
Sq.13, lot 13-late	39	1	14	6	0	0	1	0	61
Sq.10, lot 6-early	2	0	0	0	0	0	0	0	2
Sq.10, lot-late	4	1	1	0	0	0	0	0	6
Sq.10, lot 8-early	3	0	0	0	0	0	0	0	3
Sq.10, lot 8-late	1	0	0	0	0	0	0	0	1
Sq.21 - early	8	3	3	1	0	0	1	1	17
Sq.21 - late	14	4	4	2	1	1	1	3	30
	82	11	28	11	1	1	4	4	142

Table 50. Summary of Biomass (in kilograms) Distribution in Major Analytical Units.

Analytical Unit	Domestic Mammal	Wild Mammal	Domestic Bird	Wild Bird	Turtle	Amphibian	Fish	Total
Sq. 13, Church lot	21.76	0.05	0.53	0.13	0	0	0	22.47
Sq. 13, lot 13-early	46.91	0.03	0.21	0	0	0	0.03	47.18
Sq. 13, lot 13-late	96.77	0.06	1.44	0.73	0	0	0.08	99.08
Sq. 10, lot 6-early	2.1	0	0	0	0	0	0	2.1
Sq. 10, lot 6-late	14.44	0.06	0.07	0	0	0	0	14.57
Sq. 10, lot 8-early	7.19	0	0	0	0	0	0	7.19
Sq. 10, lot 8-late	0.55	0	0	0	0	0	0	0.55
Sq. 21 - early	43.08	0.58	0.29	0.02	0	0	0	44.02
Sq. 21 - late	77.63	0.93	0.41	0.20	0.08	no formula available	0.01	79.26
	310.43	1.71	2.95	1.08	0.08	0	0.12	316.42

*Biomass totals exclude weights of commensals, dogs and domestic cat.

Table 51. Faunal Element Distribution at Algiers Point.

Element	Cow	Pig	Sheep	Caprine	Deer
Head	5	14	1	3	0
Vertebrae	176	14	0	2	0
Ribs	218	49	0	12	0
Forequarters	147	116	0	27	3
Forefeet	31	15	2	0	0
Hindquarters	129	77	2	30	5
Hindfeet	21	15	3	2	0
Feet	5	15	0	1	1
Other	21	—	—	—	—
Total	753	315	8	77	9

dog remains found in the same excavation unit at Level 4. Both chickens and turkeys were represented by head elements, as well as by other skeletal parts. The single frog bone was from the hind leg, a tibiotarsus.

Modifications to the bones included gnawing, cleaver cuts, small knife cuts, and sawing (Table 52). Saw and hack marks found on the bones of the four artiodactyls are summarized in Figures 60. The elements are assembled in anatomical order. In Figure 60, the side is indicated where it could be determined. Where the side is not indicated, the side was indeterminate. Sawed areas are drawn as straight lines, and hacked or broken areas are drawn as irregular lines. Only a representative sample of cow ribs are illustrated. Both sheep and other caprines are illustrated on the caprine sheets.

Sawing is the most interesting bone modification. This process is not thought to have been common until the 1800s (Deetz 1977); however, there has been some evidence that sawed bones may be found in high status contexts prior to the 1800s (Reitz and Scarry 1982). Some sawed bones were identified from pre-1850s contexts, although it is not known how many of these may have been deposited in the eighteenth century. Sawing of bone implies that cuts of meat were prepared for individual consumption. The highest percentage of sawed bones were those of cow, of which more than sixty percent (60.8%) were sawed. By contrast, thirty-nine percent of the pig bones and thirty-four percent of caprine bones were sawed. It should be noted that some bias may be inherent in these figures. Cancelleous bone, bones that have a thin cortex (such as the long bones of sheep, goats, and the younger pig specimens), and epiphyseal fragments such as the head of the humerus (especially those of young mammals), may suffer sufficient breakage and abrasion in the burial/excavation process to obliterate signs of sawing. The more robust bones, such as those of cow, are less affected by these taphonomic processes.

Two butchering techniques common in this sample affected analysis of the sawed bones. Many limb elements, particularly those of cow, were sawed both proximally and distally. For example, many of the radii (or fused radius and ulna) were represented by shaft fragments only. While such shafts were commonly identifiable, this technique prevented age-group determinations based on epiphyseal fusion for the bones sawed in this fashion. Cross-sections or "slices" of the shafts of long bones were extremely common cuts of both beef and pork. These slices ranged in thickness from 0.5 cm to 5 cm. While the thicker cross-sections tended to be identifiable to element, many of the thinner ones were not.

Other types of modified bones were less common. Some of the bones had been cut lightly along the surface of the bone. Such nicks usually are the result of removing meat from bone. This may happen before or after cooking. Hack marks are those which might have been caused by cleaver blows. This fairly common modification is the result of hacking joints into smaller units. Although gnawing was not overly common in the collection, these marks indicate that trash was not buried immediately after being dicarded. Some bones lay exposed for enough time for rodents to

Table 52. Bone Modifications at Algiers Point.

	Sawed	Cut	Hacked	Rodent Gnawed	Burned
UD Mammal	1	1			3
UD Artiodactyl	323	31		1	45
Pig	123	11	3	4	1
Deer	2	1			
Cow	458	27	9	3	
Caprine	29	4			1
Rabbit		1			4
Goose		1			
Chicken		2			8
Catfish	1				
Total	937	79	12	8	62

gnaw on them somewhat. So few bones (62) were burned that roasting almost certainly was not a major cooking method. Where roasting was commonly practiced, much of the identified bone usually is burned. All but one of the burned bones were from the Church Lot in Square 13. The remaining burned bone was also from Square 13 - Feature 65. Two oddities in the collection deserve mention. A synsacrum fragment in the UD bird category and a cleithrum from the channel catfish had been sawed. One bone had been worked. This was a highly polished bone handle from Square 13, Lot 13, Levels 1 and 2, FS #427. This was a kitchen area. The mammal from which the bone was derived is unknown.

Age at death was determined by the degree of epiphyseal fusion (Table 53). There is very little evidence that adult mammals were consumed. Eight pig bones, possibly representing two individuals, were probably from suckling pigs. This inference is based on several observations. Two of these bones (a radius and a scapula) exhibit the porous, somewhat spongy texture of juvenile bone. The remaining six bones are extremely small in shaft diameter, and the epiphyses are completely unfused. Additionally, there were three deciduous teeth in the pig material. All the deer bones were from adult individuals. Three calves were less than 18 months old when slaughtered. As in the pig material, two cow bones were porous and spongy in texture, representing one very young individual. Three of the radii and one femur were extremely small in shaft diameter. The caprines were primarily young individuals; however, at least four were aged beasts. The sheep were adults, as were all of the birds.

Very little evidence for sex is available in the archaeological collection. For birds two indicators are available. The first of these is the presence or absence of a spur on the tarsometatarsus. The second is the presence of medullary deposits in the bones of female chickens. Medullary deposits are a source of calcium for females while laying eggs (Rick 1975). While the absence of medullary bone is not informative, its presence indicates consumption of laying hens. One rooster and two turkey cock spurs were identified from Algiers Point. The turkey cock spurs represent one individual. Four chicken bones had medullary deposits.

Lack of time prevented the measurement of bones. However, it was observed that several sizes of adult chickens were represented in the collection. Such size differences may well represent different breeds. The dog bones recovered from the burial represent an adult, medium-sized animal. Size differences were observed in the cattle material, as well. The tibiotarsus from the bullfrog was from a large individual.

INTERPRETATION

Due to the small samples of the individual temporal components for each Square and Lot, it is not possible to analyze the Algiers Point fauna for evidence of colonial period subsistence or for indications of change through time as the Algiers Point area progressed from a rural to an urban setting. However, it is possible to examine the materials for evidence of a

Table 53. Ages of Four Species at Algiers Point Based on Fusion of Elements.

Pig	
Age Group	# of Elements
Less than 2 years old	16
At least 2 years old	33
One to 2 years or older	14
3 years of age or older	11
Total	74

Deer	
Age Group	# of Elements
At least 1 year of age	1
15 months or older	2
Total	3

Cow	
Age Group	# of Elements
Less than 1.5 years old	3
At least 1.5 years old	36
Less than 3 to 4 years old	28
3.5 years of age or older	19
Total	85

Caprine	
Age Group	# of Elements
Less than 2 years old	11
At least 2 years old	3
Less than 3 years old	2
3.5 years of age or older	4
Total	20

general nineteenth century subsistence strategy for a working class neighborhood.

The elements identified from Algiers Point suggest interesting characteristics of consumption. The largest percentage of elements is from meaty portions of the carcass. This distribution of the identified elements indicates extensive use of butchered meat, rather than in situ slaughter of animals raised on the property. While cranial elements constitute a small percentage of the total elements identified for Algiers Point, the presence of some cranial fragments may indicate that at least some meat animals were slaughtered at the site (Table 51). The identification of cranial fragments also could indicate purchase of head meat for consumption, rather than on site slaughter of animals. Hog jowls (indicated by the presence of mandibles), tongues, and brains may have been occasional food items. The scarcity of feet elements except in the case of pigs suggests that forequarters and hindquarters of pork which included feet may have been purchased. Alternatively, feet may have been purchased specifically for consumption. Phalanges and cranial elements were identified from both turkey and chicken. The presence of these elements in chickens suggests that chickens were raised and slaughtered on the property, or alternatively, that the common marketing unit of poultry included the head and feet.

Sawed meat is generally considered to be an indication that food is being prepared for individual consumption at specific serving times, in contrast to roasts which are cooked in advance and consumed within a wide time span by many individuals. The presence of large number of sawed thin sections of bone, and of low numbers of burned or hacked bones, suggests that preparation of individual portions of meat was common in this project area. This practice, in combination with evidence for the purchase of butchered meats rather than slaughter of home-grown animals, indicates the urban nature of the area and its orientation toward wage labor rather than self-sufficiency.

The animals consumed were from several different age groups. Two of the pigs were suckling individuals, yet several of the pigs were mature at death. Likewise, three of the cows were less than 18 months of age at death and may have been slaughtered for veal. However, some of the cattle were over three years of age at death. Caprines were both very young and very old individuals. While two of the caprines were less than two years of age at death, two of them as well as both of the sheep were adults. These adults may have been slaughtered for mutton only after having been used to produce wool for several years. This indicates use of a wide range of age groups, with a strong preference for sub-adults. It is interesting that both roosters and laying hens were consumed. Both of these have been identified from more affluent contexts as well.

At Algiers Point, the most abundantly used food item was beef. Cows represent more than 25 per cent (25.35%) of the total number of individuals identified. Pigs, the second most abundant (20.35%), and chickens (19.0%) were present in almost equal numbers of individuals, but pigs contributed a greater percentage of usable meat than did chickens - 15.61% vs. 0.77% of the biomass. Caprines

were relatively abundant - fourteen individuals represent almost ten percent (9.86%) of the total number of individuals. There was quite a bit of diversity in wild mammals and wild birds, both categories being present in equal proportions (Table 49). Fish were represented by only four individuals (2.8% of the MNI). Individually, all of the wild fauna consumed were minor components of the diet; combined, however, they contributed 20% of the individuals.

A comparable pattern can be seen at the New Orleans General Hospital Site (Goodwin and Yakubik 1982a). Although part of the collection was collected from plantation contexts, the bulk of the collection was excavated from late nineteenth century low to middle class urban contexts. As at Algiers Point, cows were abundant (24% of the individuals), although pigs were somewhat more abundant (27% of the MNI). Beef was much more heavily used than pork, however. Chickens (24% of the individuals) were as abundant as cows, although their contribution to biomass was slight in comparison to that of cows and pigs. Caprines also were present at the General Hospital and constituted 6% of the total number of individuals. Wild birds were not identified at the General Hospital site. At this site, as at Algiers Point, few fish were represented (5% of the individuals). Wild resources combined contributed 10% of the individuals.

The Elmwood Plantation Site (Goodwin, Yakubik and Goodwin 1984), located on the East Bank of the Mississippi River, Jefferson Parish, Louisiana, presents another interesting comparison. This was a nineteenth century plantation. Although the sample from this site was considerably smaller than that from either Algiers Point or New Orleans General Hospital ((Total MNI of 45, as opposed to 101 at NOGH and 142 in the Algiers Point sample), a similar general pattern can be discerned. Cows and pigs constituted the bulk of the sample, with equal numbers of individuals (each contributed 13% of the individuals). Once again, beef was more plentiful than pork. Caprines constituted 11% of the individuals at Elmwood. Wild mammals contributed 20% of the individuals, and wild birds contributed 7%. These categories were also highly diverse in terms of the variety of taxa identified. Fish were somewhat more abundant than in the other collections (11% of the individuals). Wild resources combined contributed 40% of the individuals, which probably reflects the site's rural nature.

David Kelley's work at the New Orleans Post Office site (16 OR 63) presented data for a sample of residential deposits associated with nineteenth century upper middle class households (1982). Kelley found that there had been a heavy reliance upon domestic animals, particularly cattle. Cattle were more abundant than pigs. Caprines constituted 6% of the individuals. Chickens were a significant part of the diet (16% of the individuals), as were wild resources (42% of the individuals). Fish were the most abundant of the wild food categories, and probably constitute the reason why wild resources generally were more abundant in this collection than in the other urban samples studied. This may reflect a similar situation on the Atlantic coast, where more affluent urban households utilized wild resources to a greater

extent than did less affluent urban households.

Some of these similarities are consistent with observed characteristics of Atlantic coast urban sites from the 1750s to the 1850s: cows were generally more common than pigs; use was made of diverse wild birds and mammals; and, there was little reliance on fish (Reitz 1984). However, the use of caprines in any significant numbers appears to be a consistently unique characteristic of Gulf coast/Delta sites when compared to Atlantic Coastal Plain sites. Analysis of faunal samples from such sites as the Charleston Convention Center and the Savannah-Telfair site, as well as from other late eighteenth and early nineteenth century Atlantic Coastal Plain rural and urban sites, indicates that caprines seldom were included in the diet. Other characteristics of the Algiers Point faunal assemblage appear to be consistent with those of an urban assemblage.

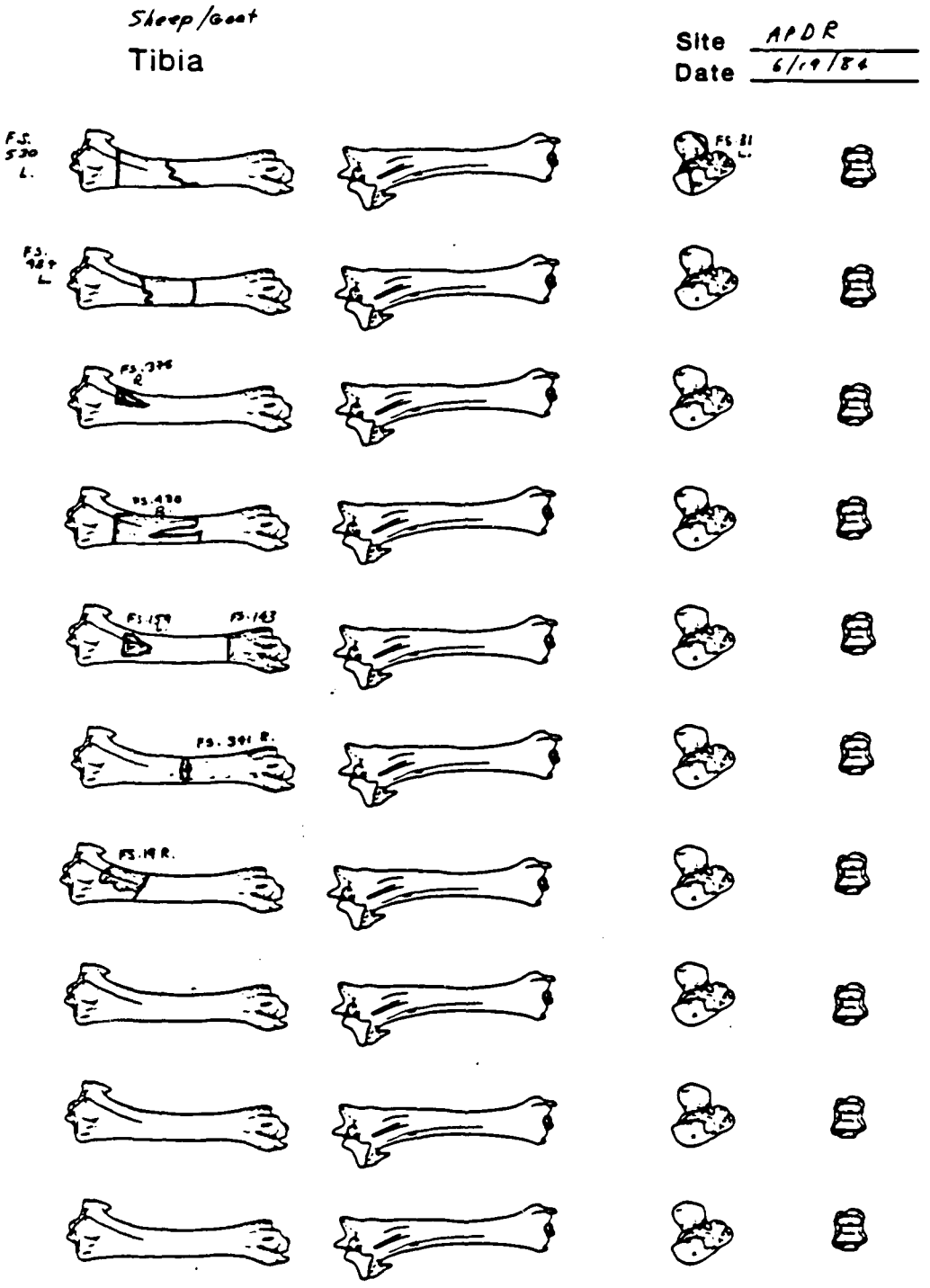


Figure 63. Butcher marks on bones from the Algiers Point faunal subassemblage.

Sheep/Goat

Femur

Site APDR

Date 6/19/84

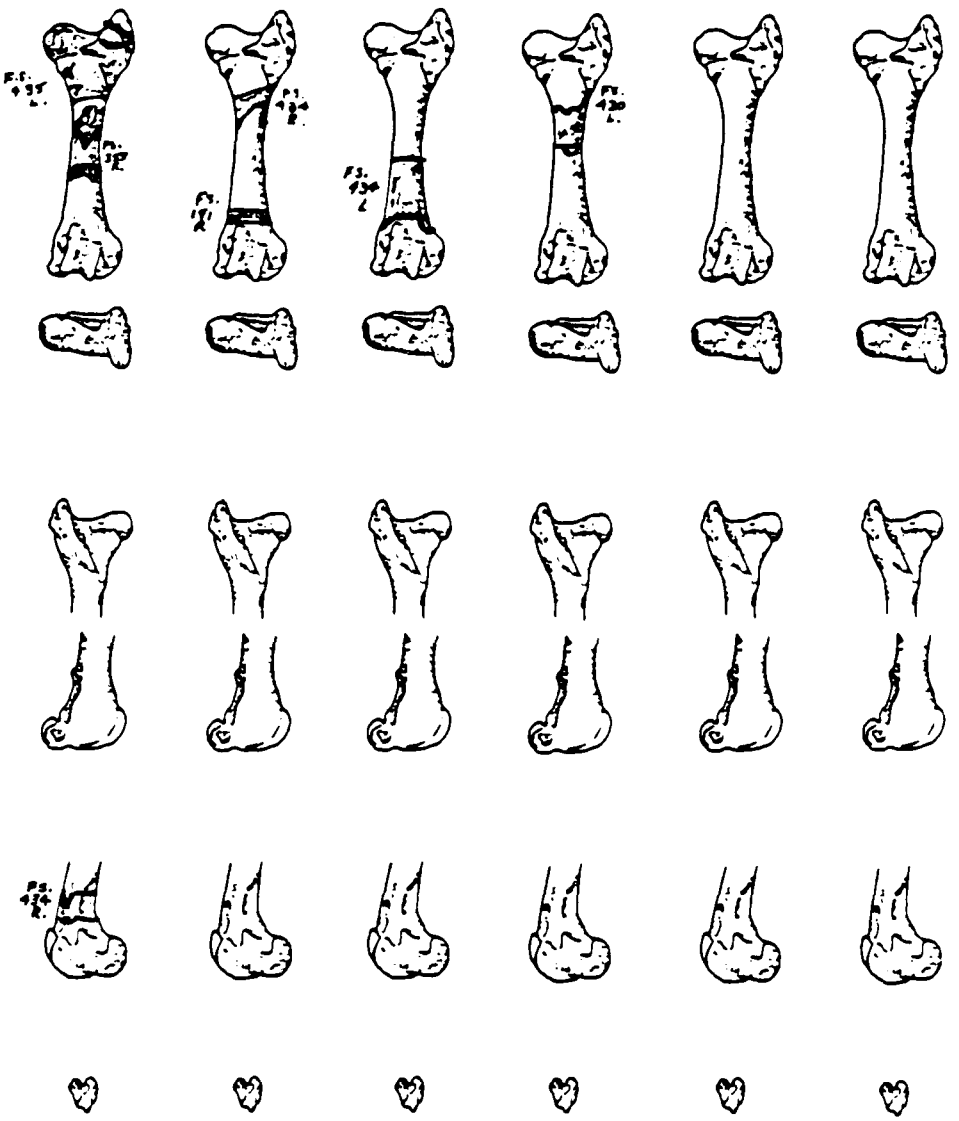


Figure 63, Continued.

Sheep/Goat
Innominate and Sacrum

Site APDR
Date 6/20/84

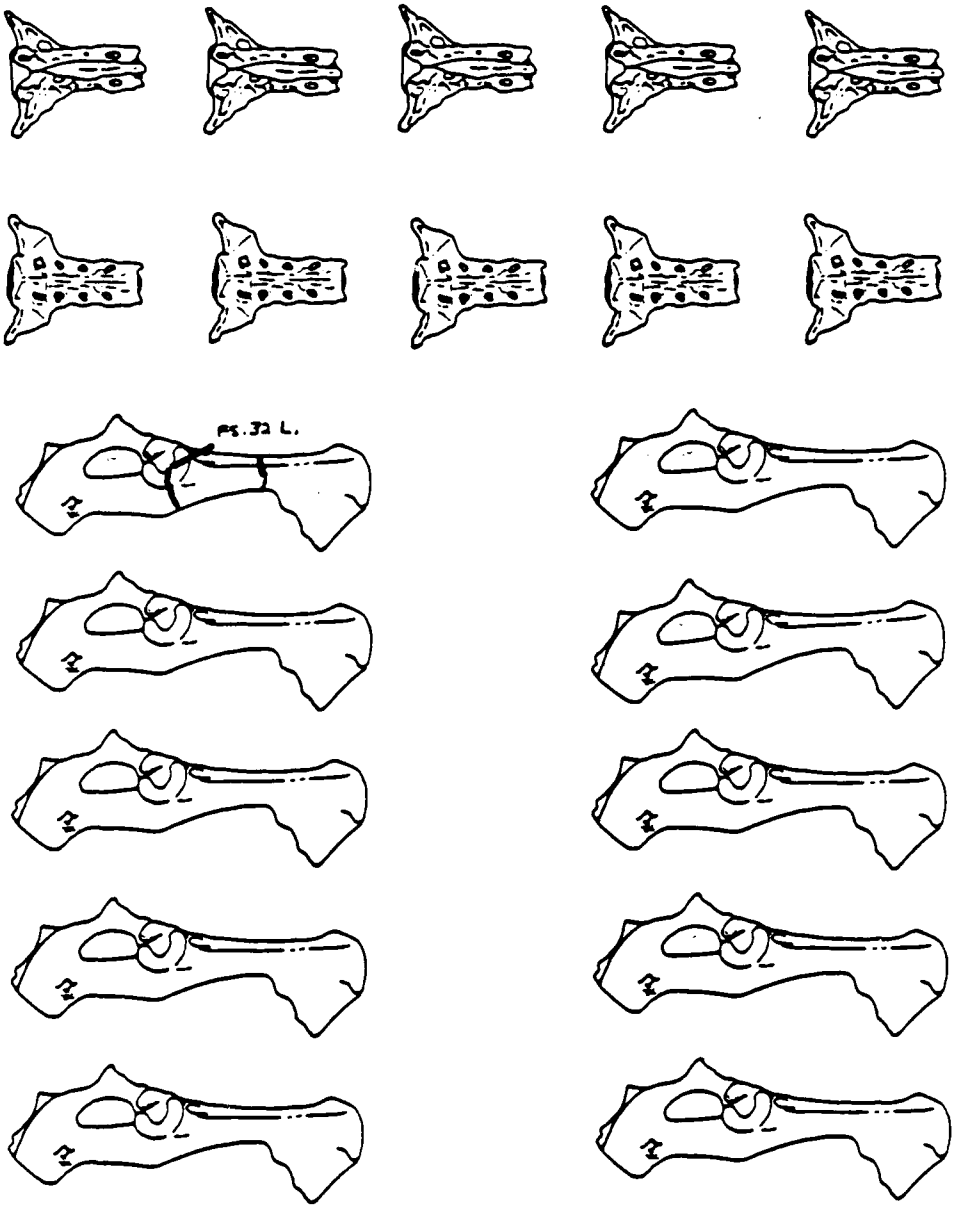


Figure 63, Continued.

Sheep/Goat

Radius and Ulna

Site APDR
Date 6/18/84

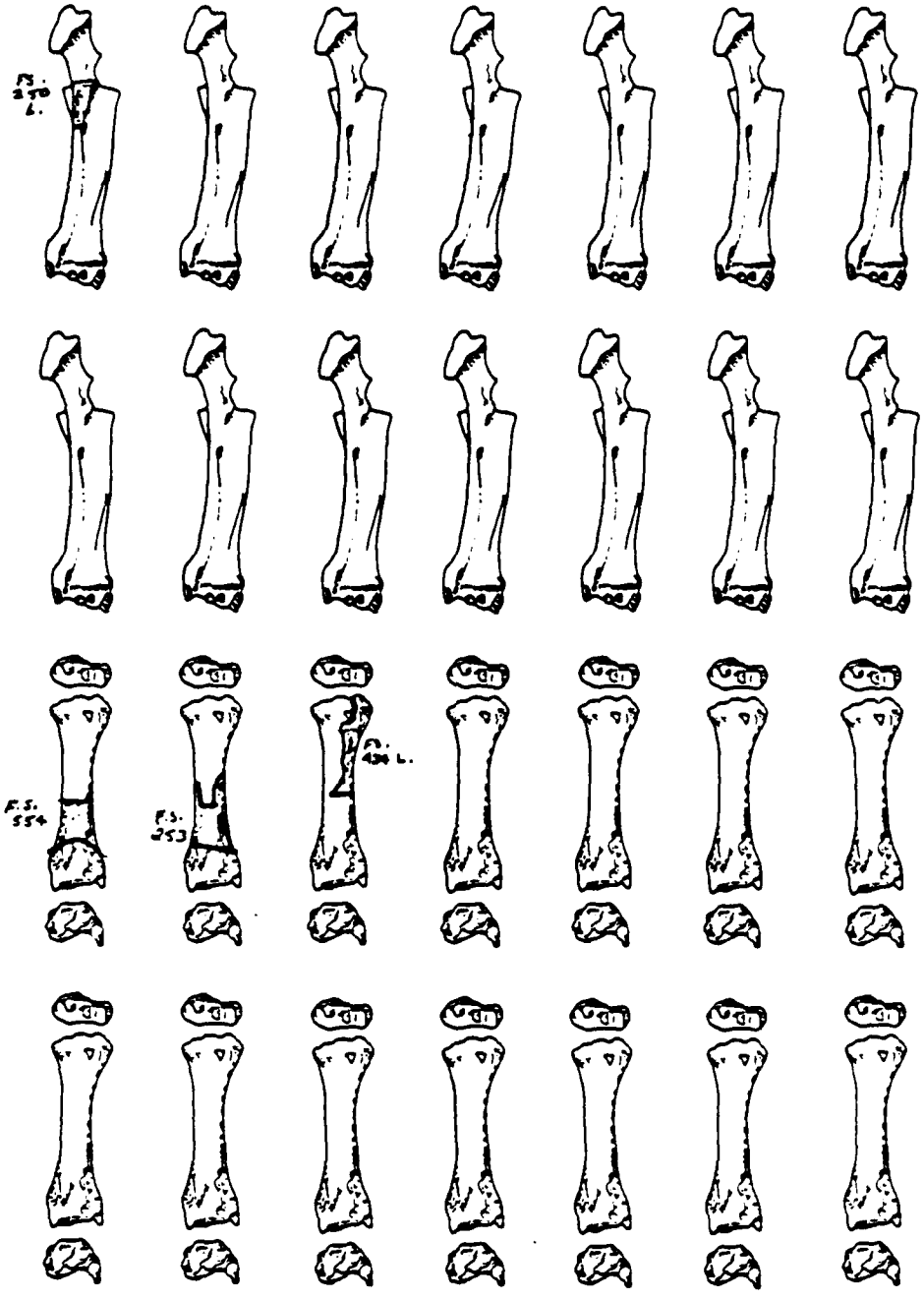


Figure 63, Continued.

sheep/goat

Humerus

Site APDR

Date 6/18/74

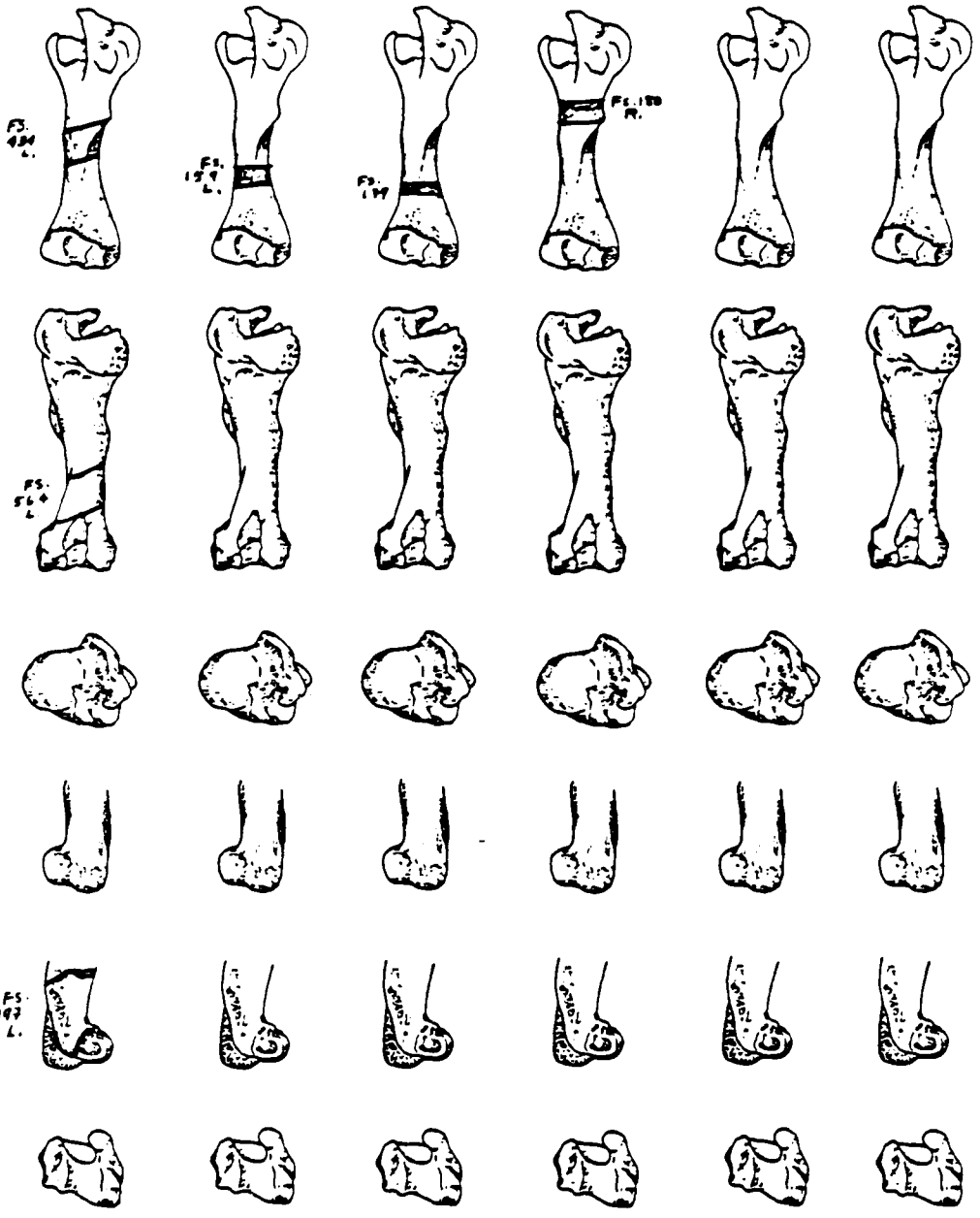


Figure 63, Continued.

Sheep/Goat
Mandible

Site APDR
Date 6/18/84

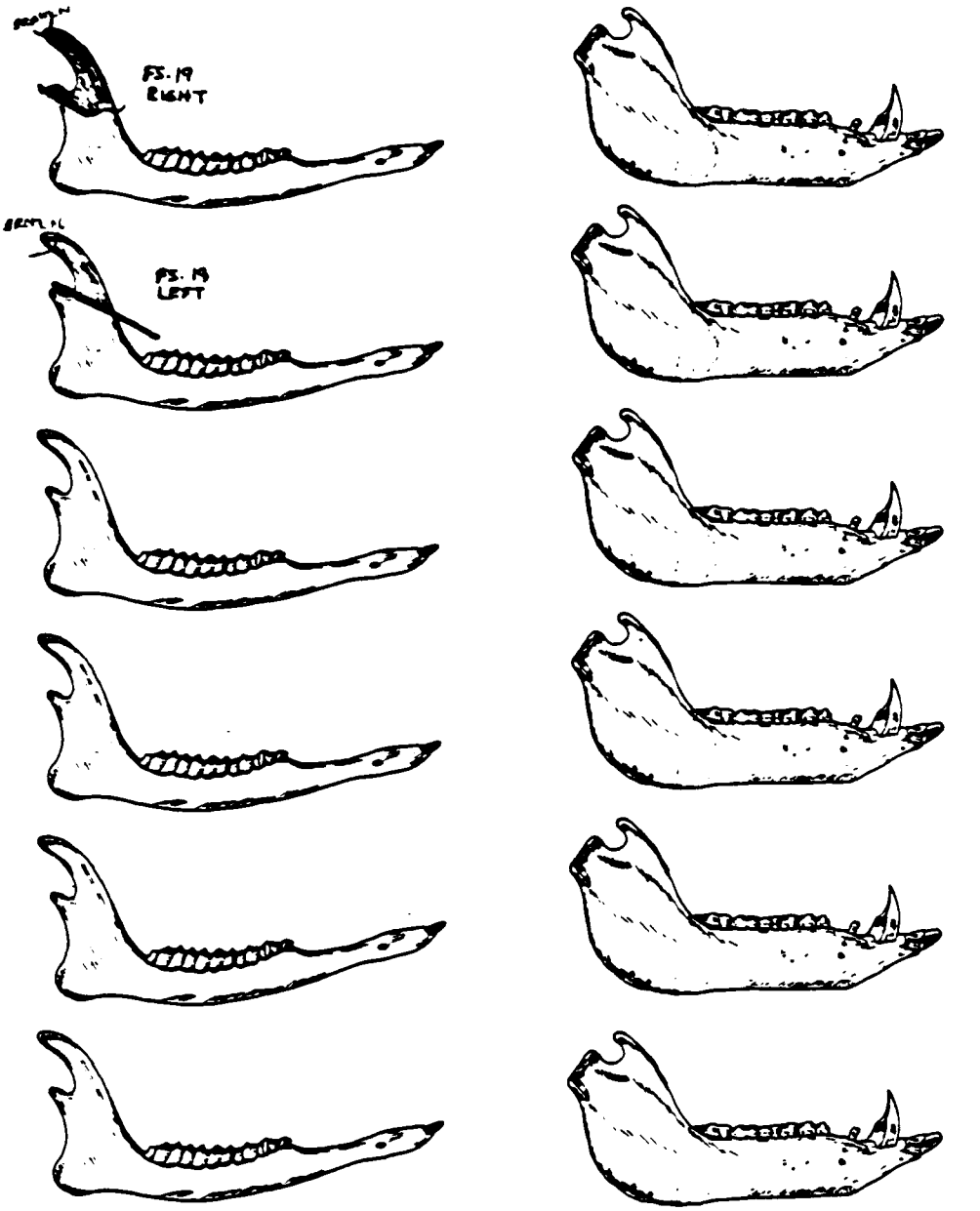


Figure 63, Continued.

Bos taurus

Tibia

Site APDR

Date 6/27/84

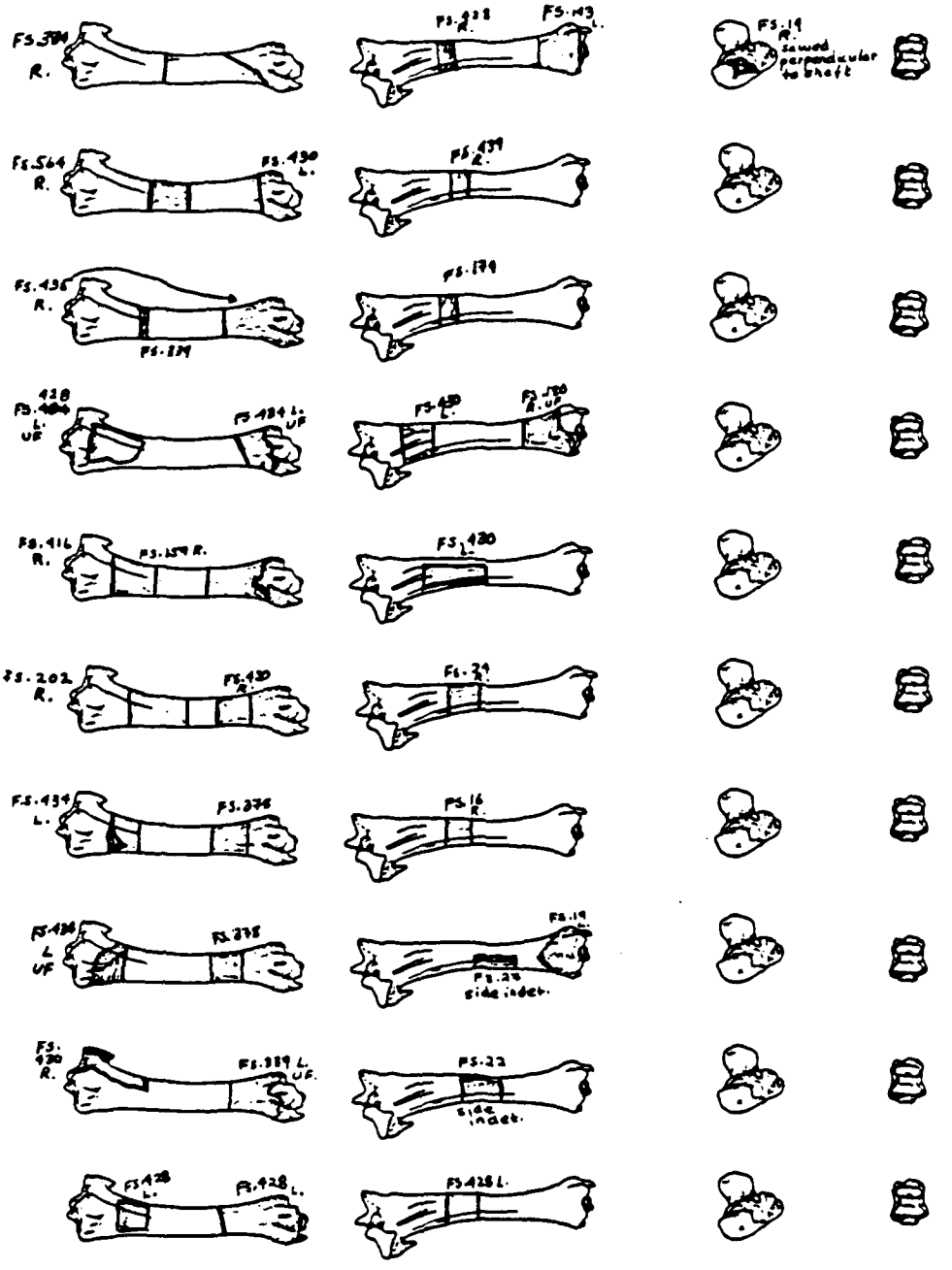


Figure 63, Continued.

Bos taurus
Femur

Site *APDR*
Date *6/18/84*

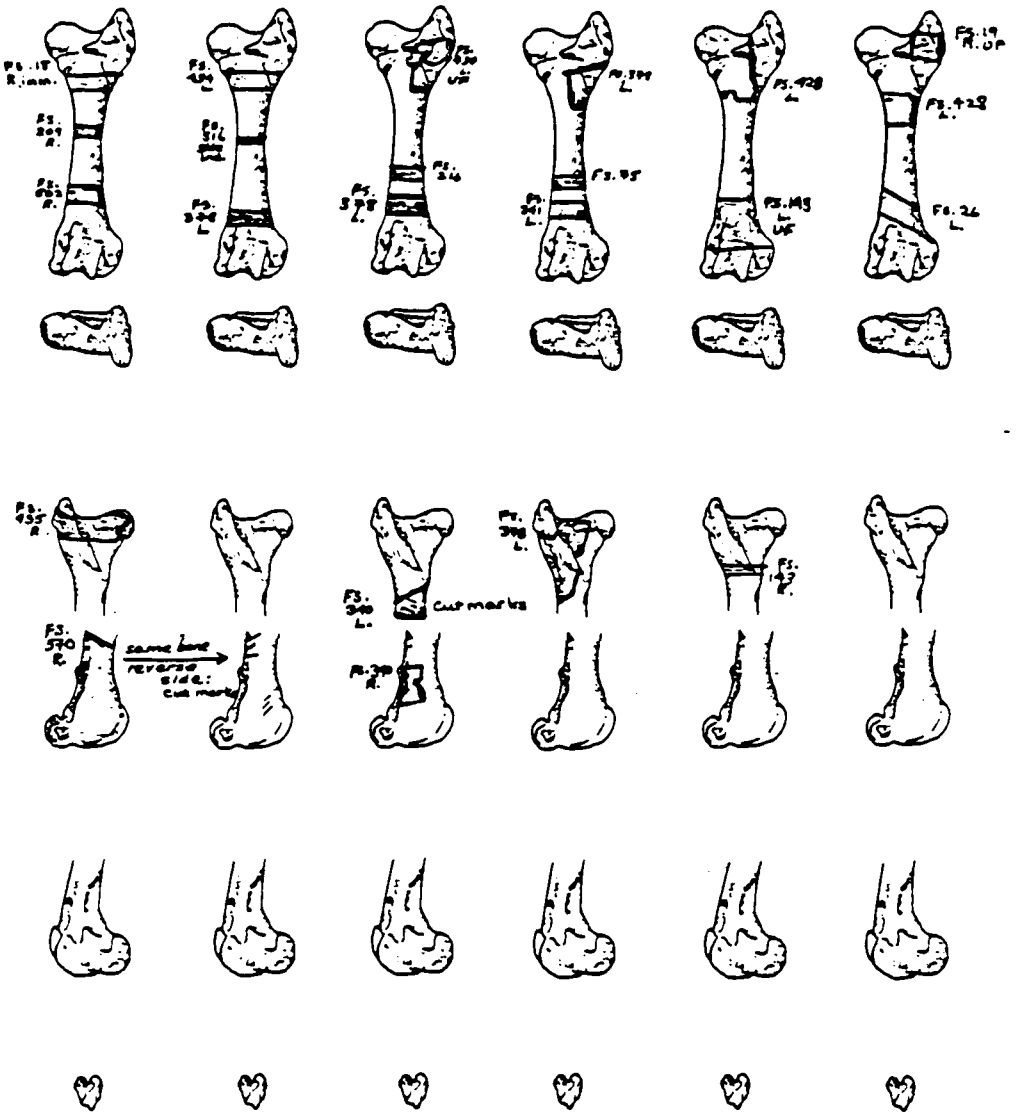


Figure 63, Continued.

Bos taurus
Innominate and Sacrum

Site APDR
Date 6/18/84

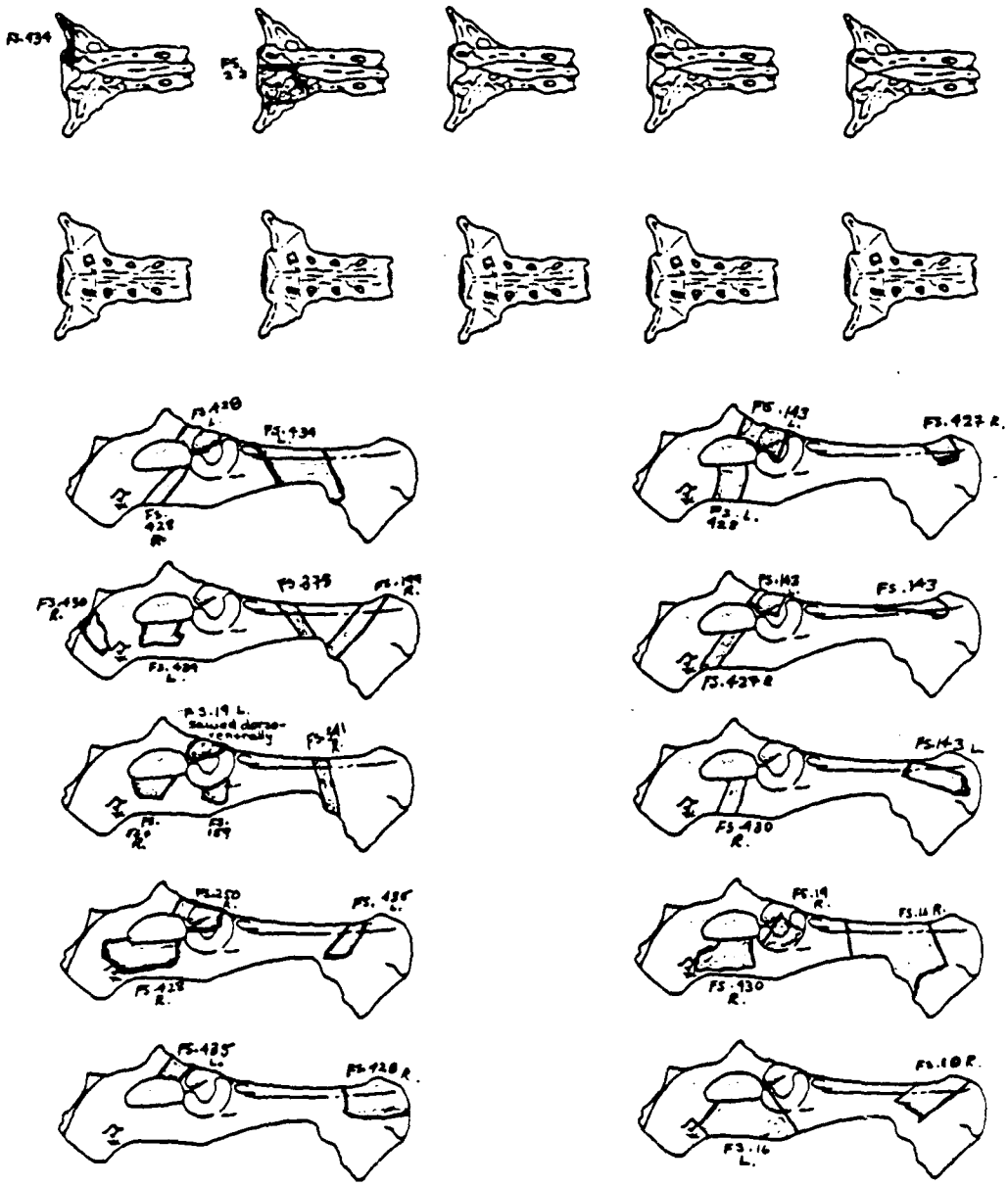


Figure 63, Continued.

Bos taurus
Metatarsal and Phalanx

Site APDR
Date 6/27/84

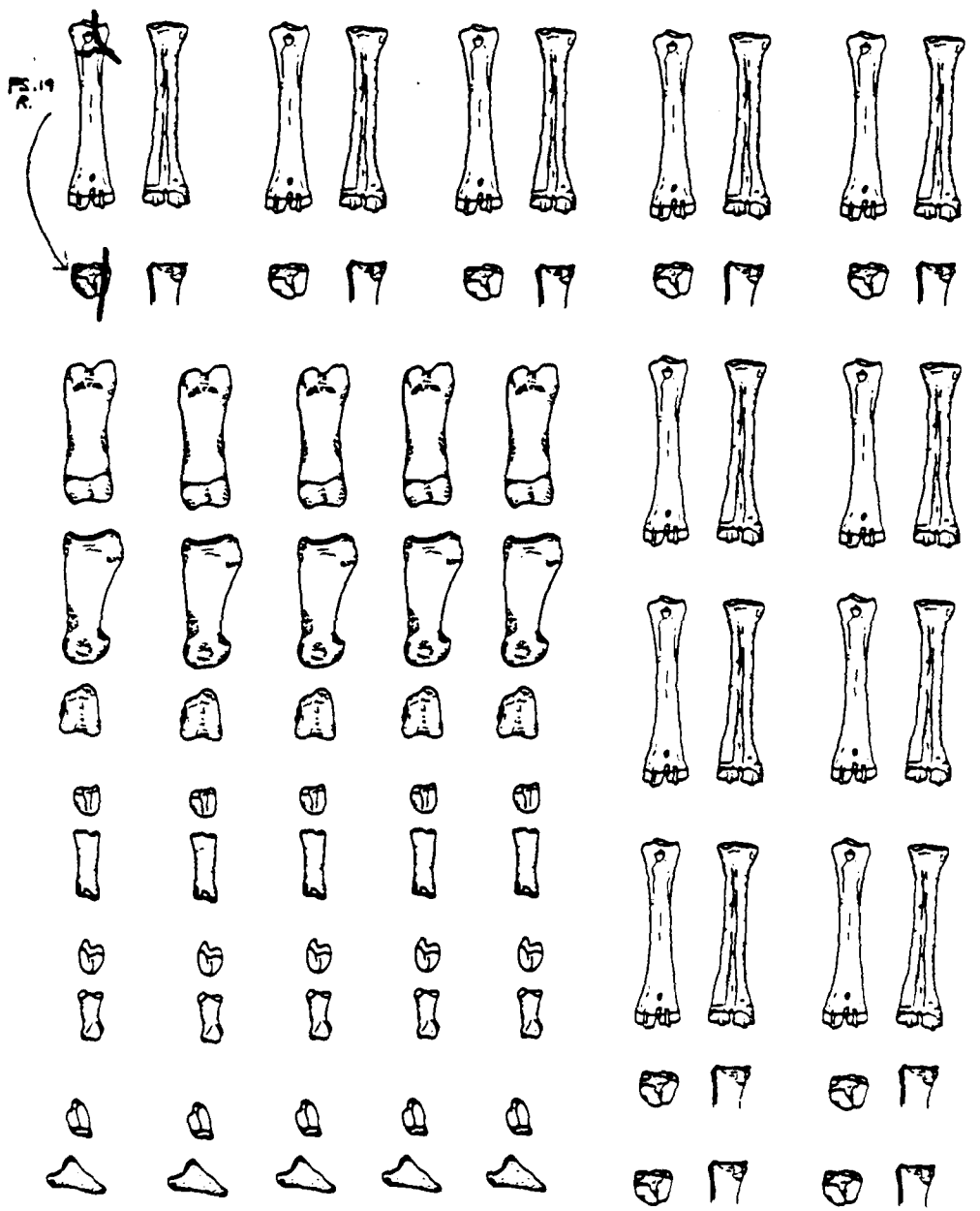


Figure 63, Continued.

Bos taurus
Calcaneus

Site APDR
Date 6/27/84

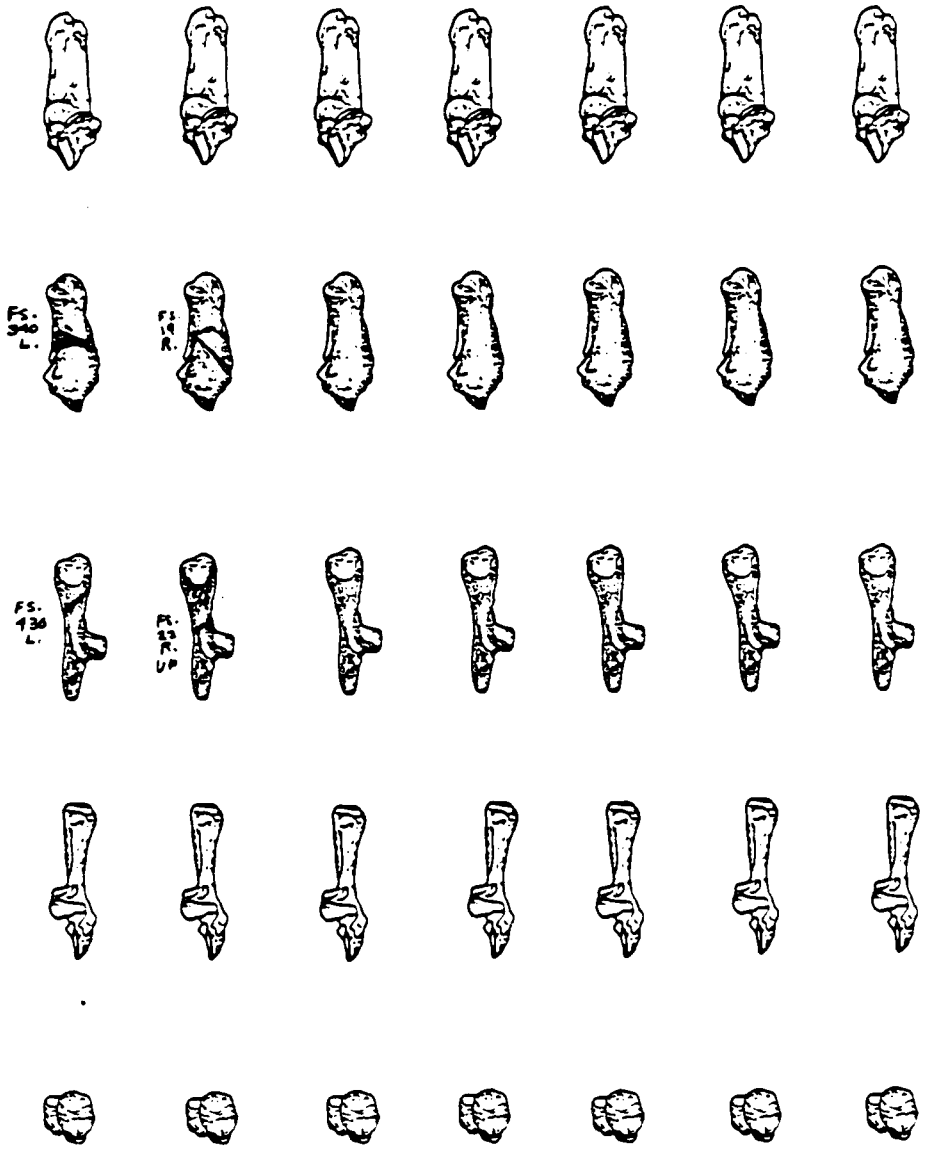


Figure 63, Continued.

Bos ~~taurus~~
Astragalus

Site APDR
Date 6/27/84

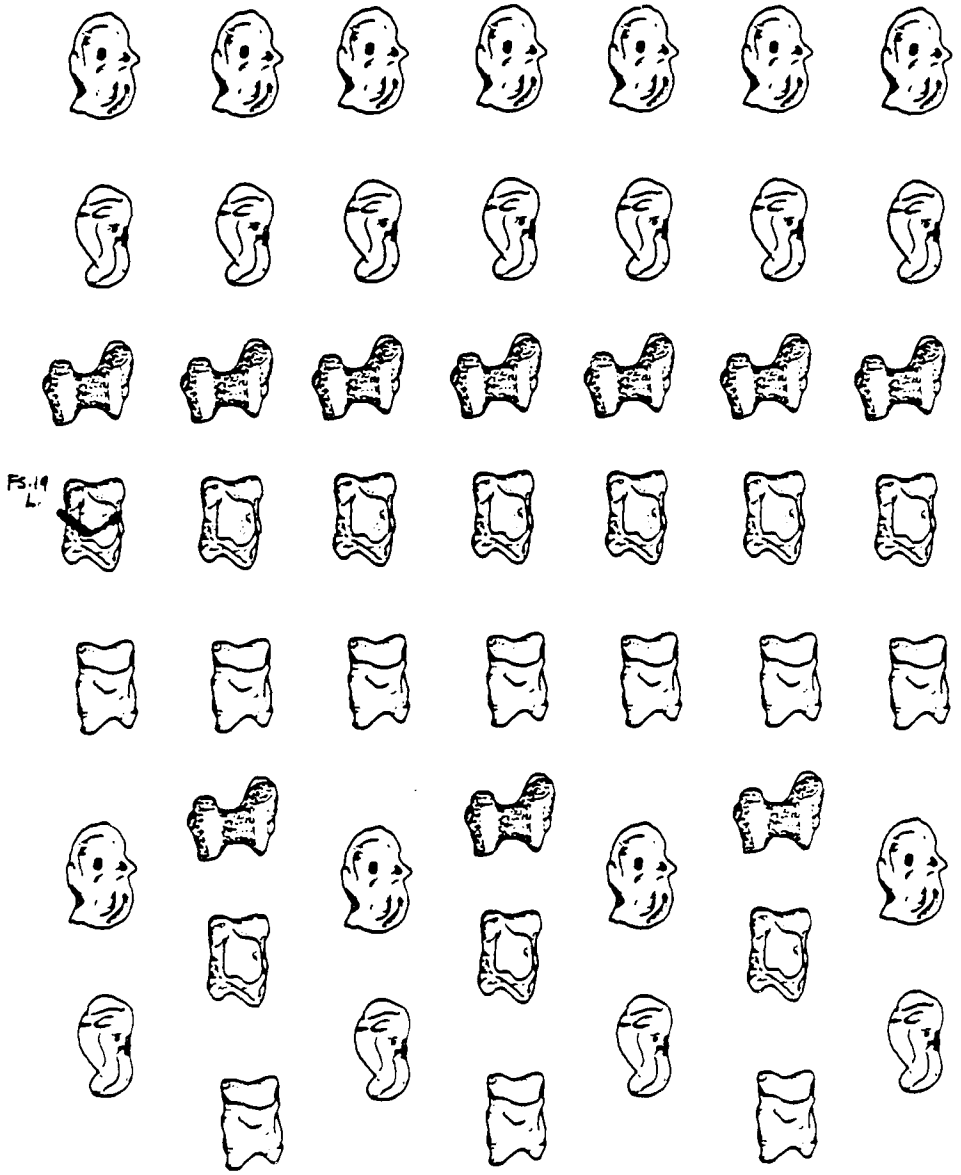
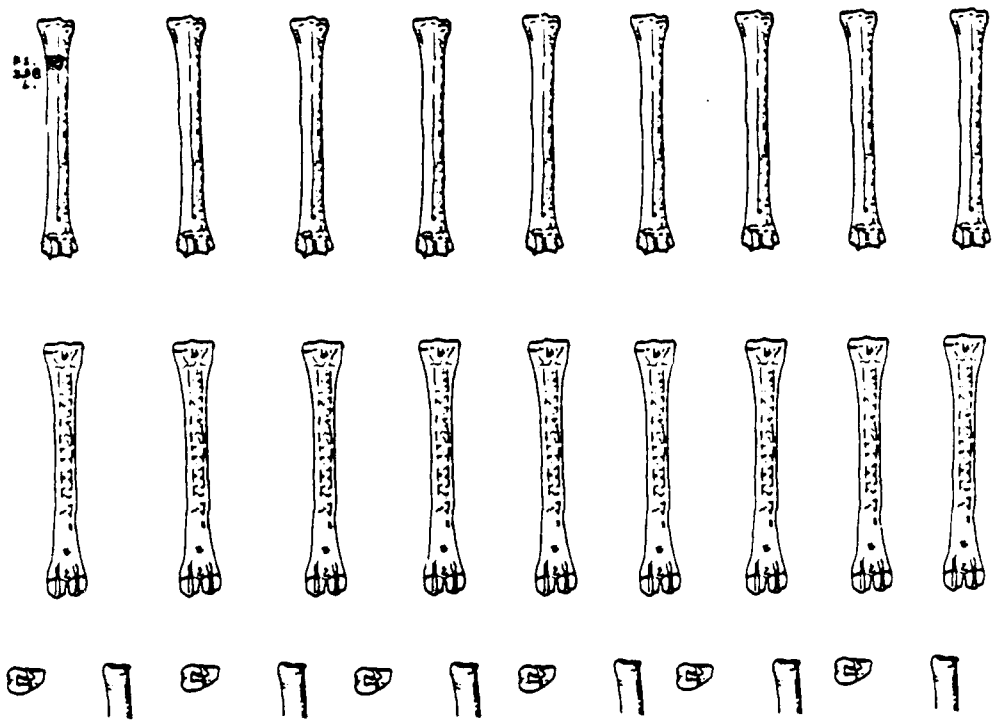


Figure 63, Continued.

Metacarpal and Metapodial

Site APDR
Date 6/25/84

Bos taurus Metacarpal



Metapodial (For use with pigs and non-artiodactyls also distal artiodactyl metapodials).

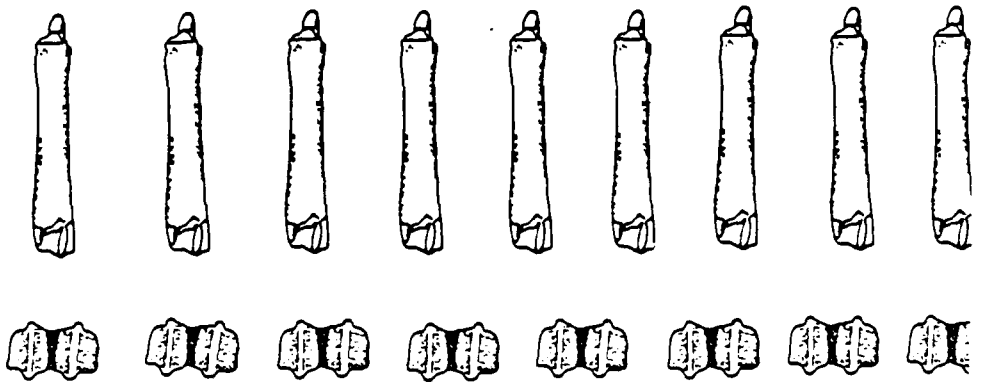


Figure 63, Continued.

Bos taurus

Radius and Ulna

Site APDR

Date 6/18/84

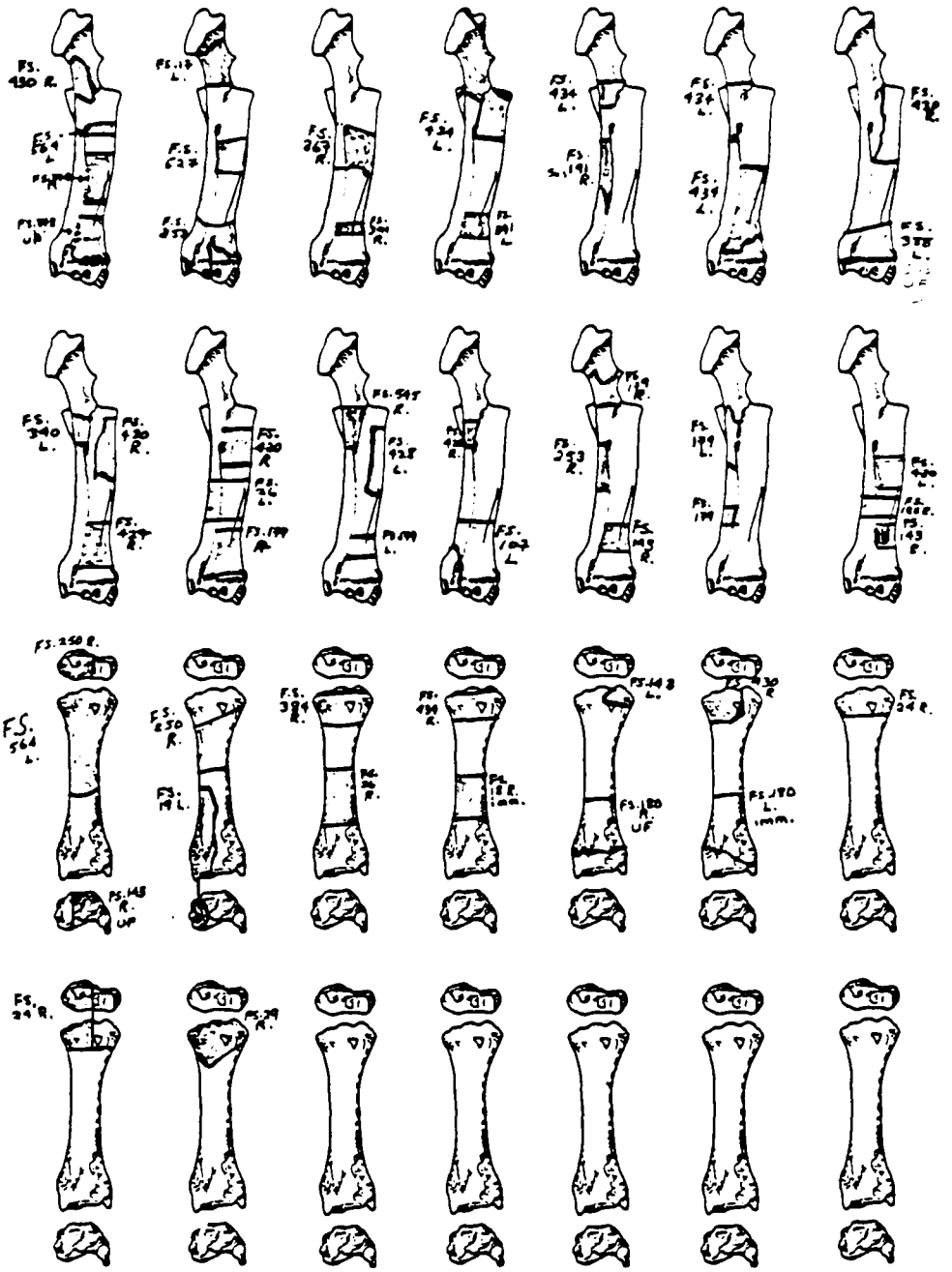


Figure 63, Continued.

Bos taurus
Humerus

Site APDR
Date 6/25/84

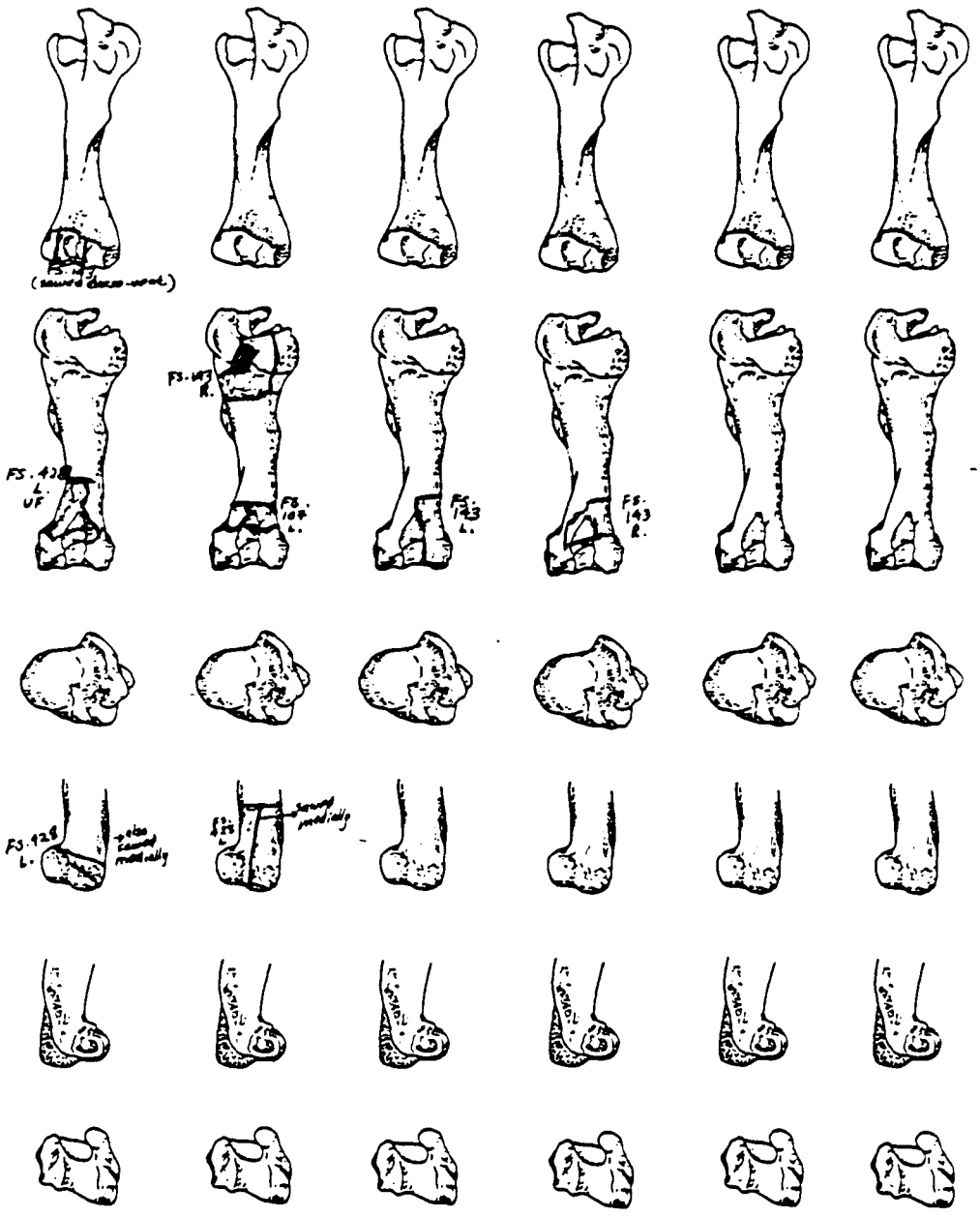


Figure 63, Continued.

Bos taurus
Humerus

Site APDR
Date 6/15/84

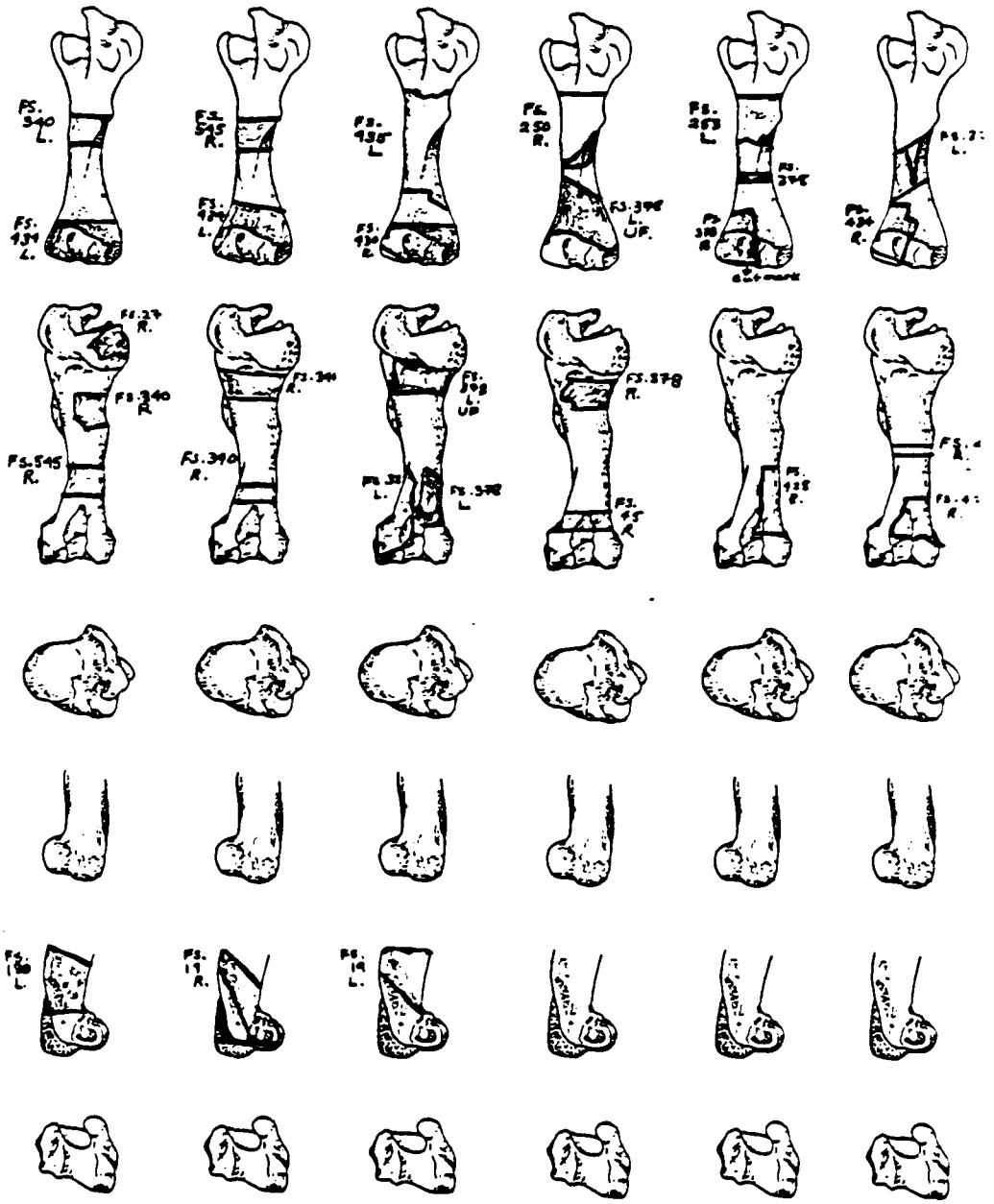


Figure 63, Continued.

Bos taurus
Scapula

Site APDR
Date 6/15/94

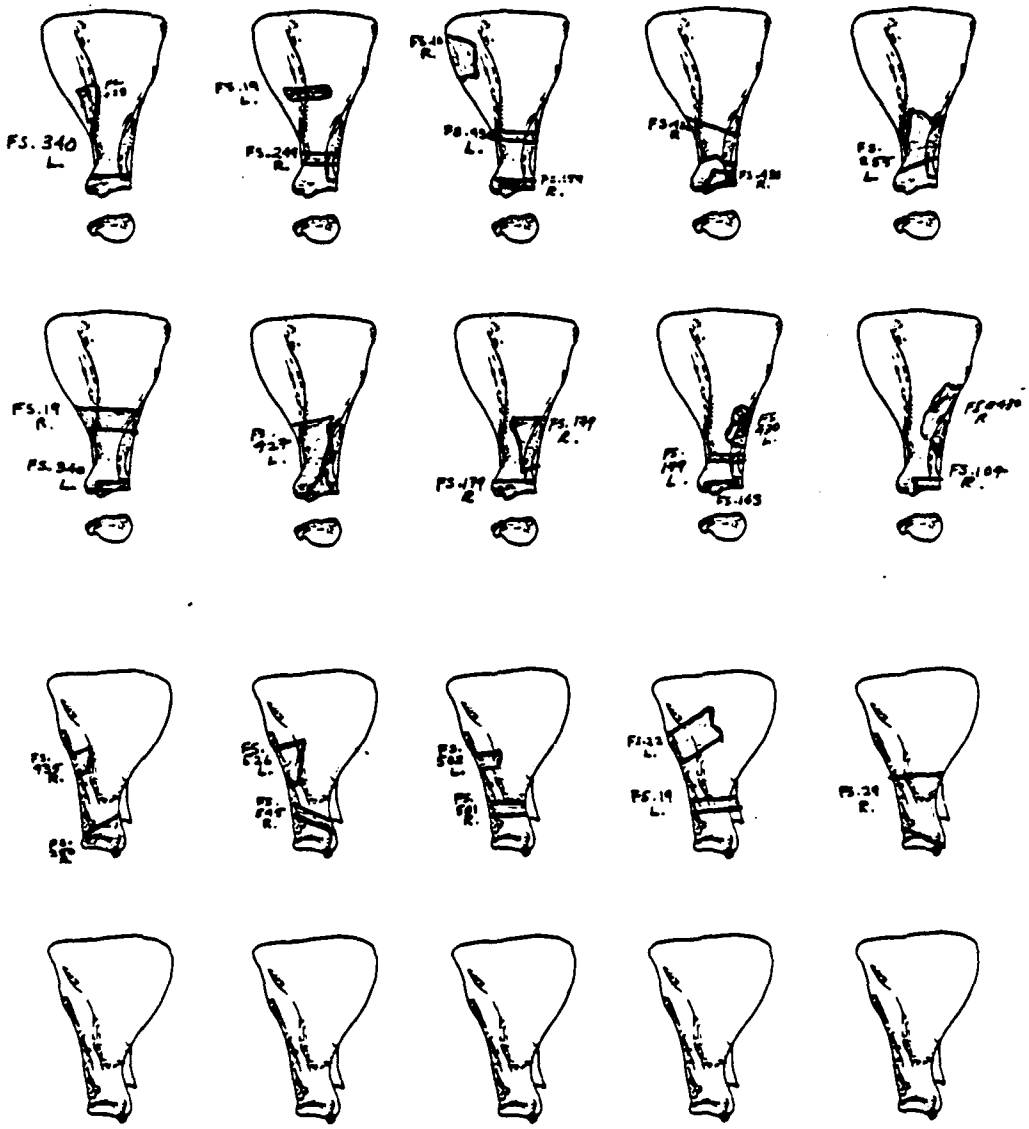


Figure 63, Continued.

Bos taurus

Vertebra

Site APDR

Date 6/18/84

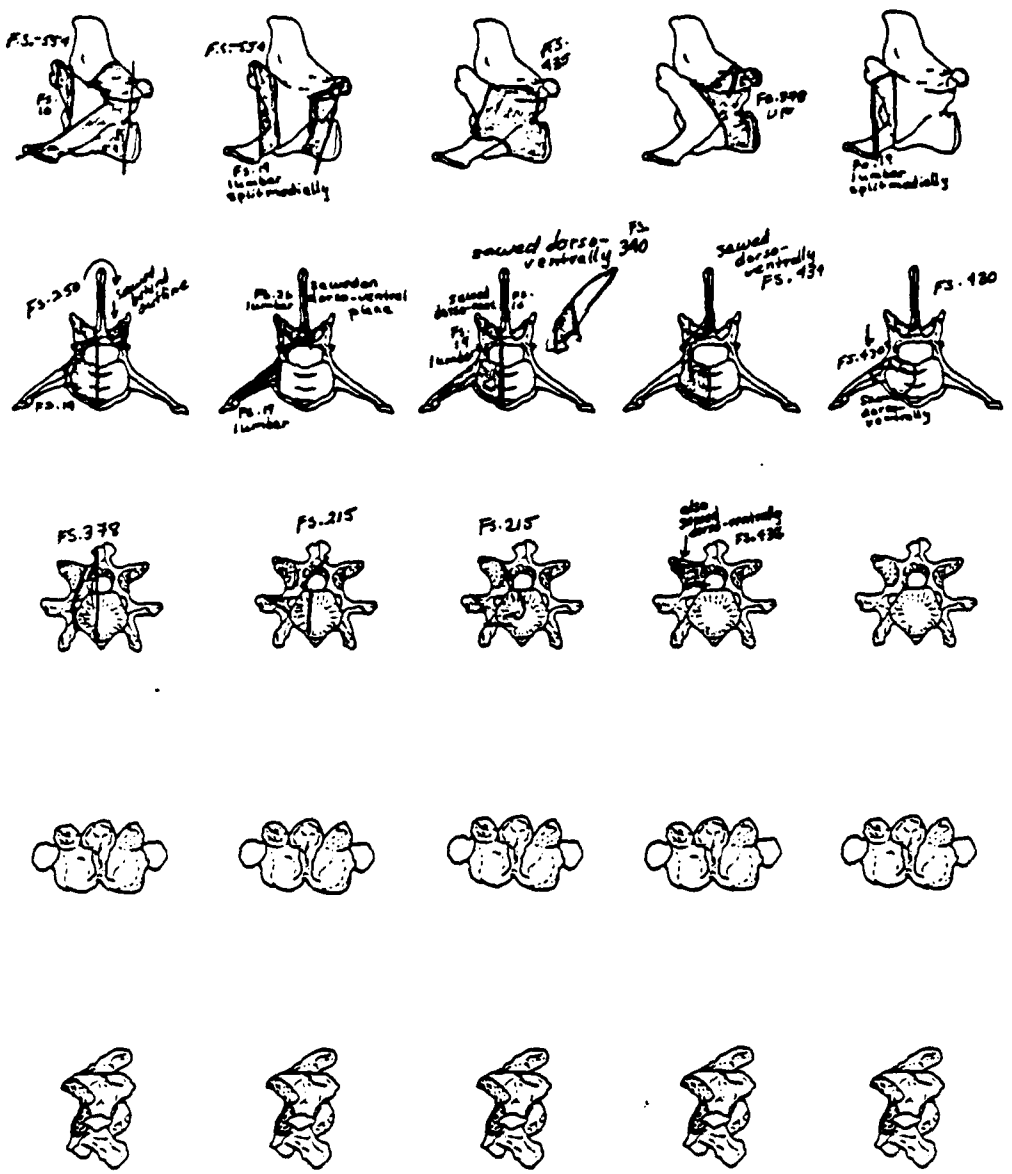


Figure 63, Continued.

Bos taurus

Atlas and Axis

Site APDR

Date 6/27/84

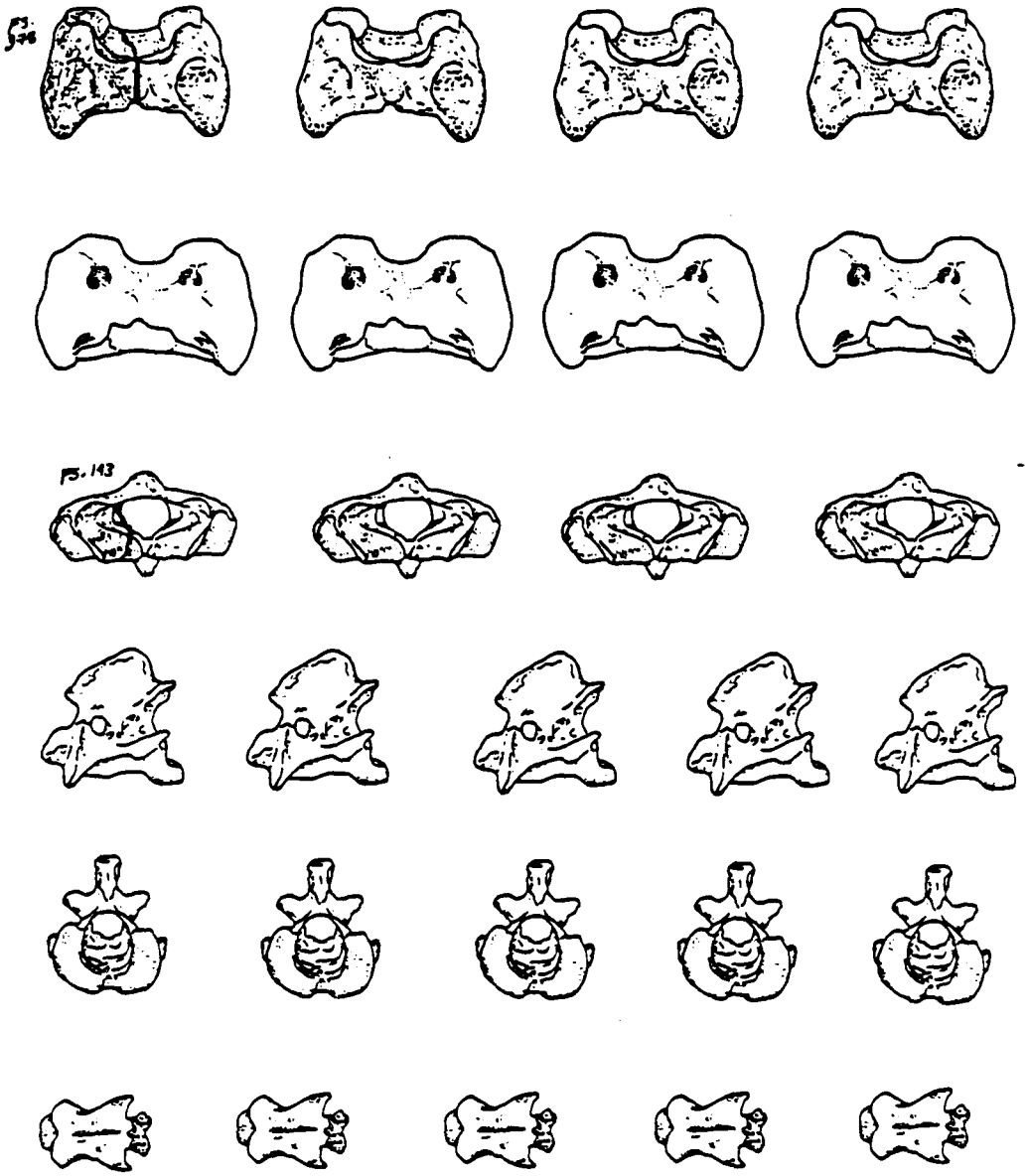


Figure 63, Continued.

Ribs III BOS TAURUS

Site APDR
Date 6/19/84

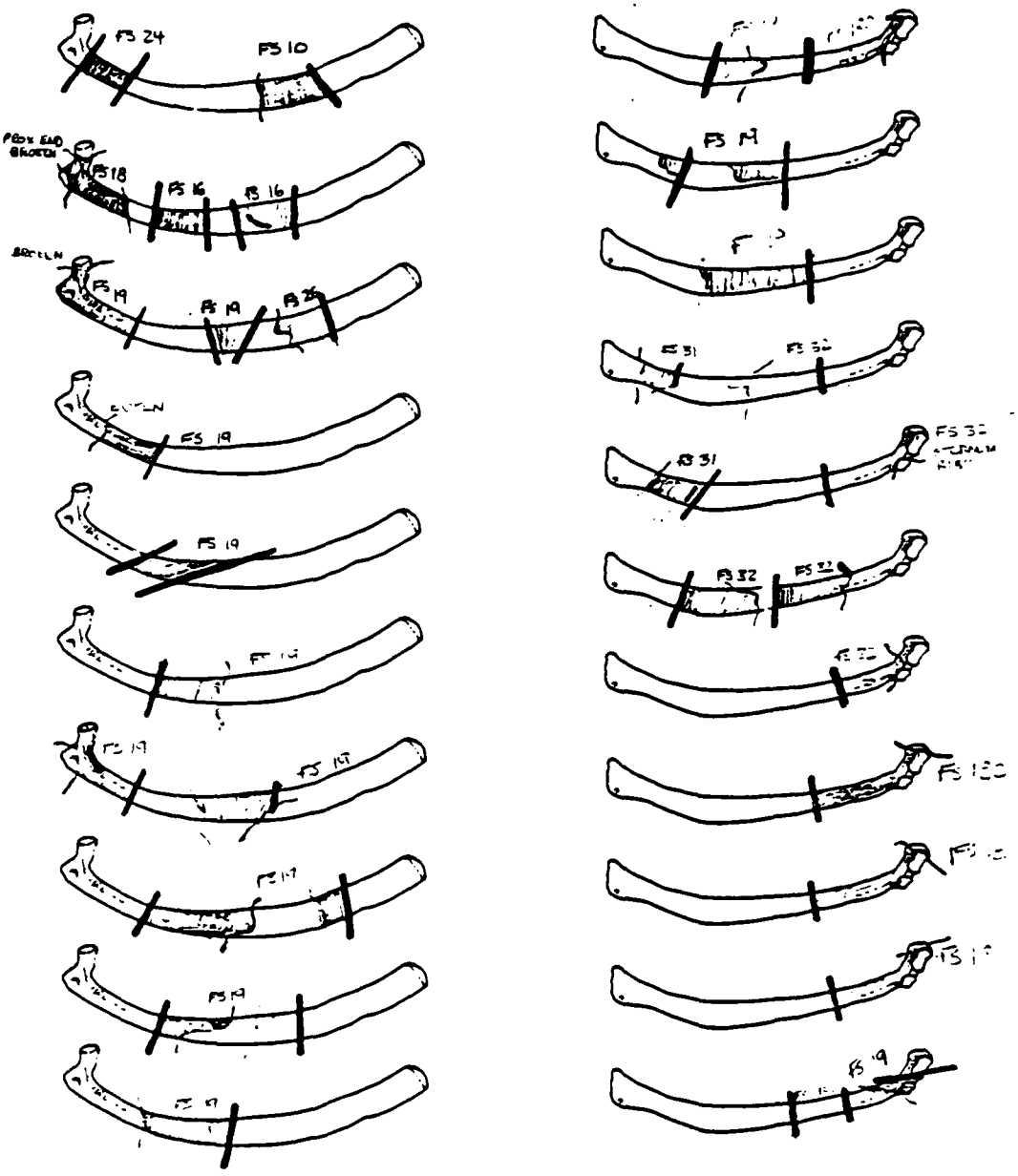


Figure 63, Continued.

Bos taurus

Ribs II

Site APDR

Date 6/30/84

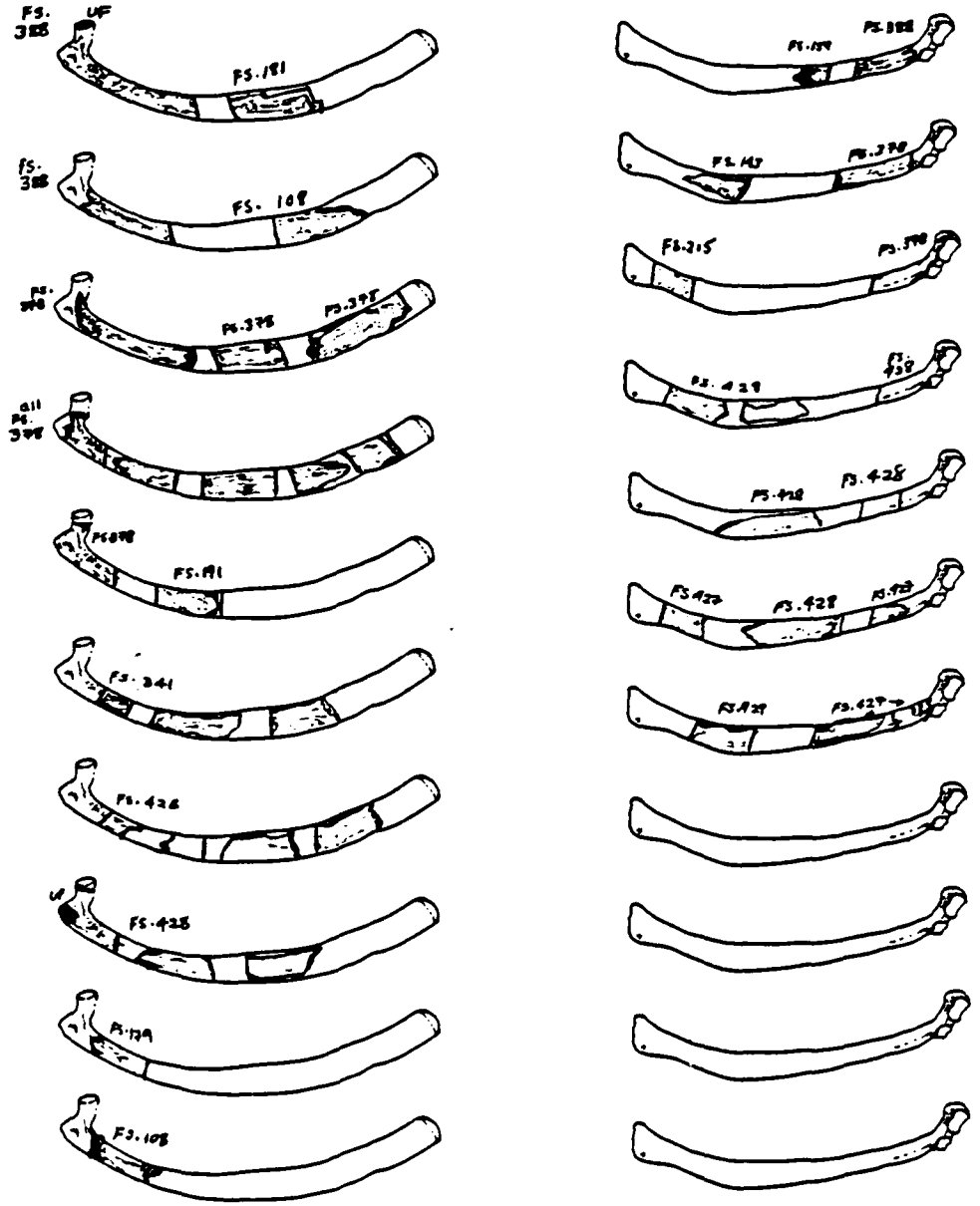


Figure 63, Continued.

Bos taurus
Ribs I

Site APDR
Date 6/18/84

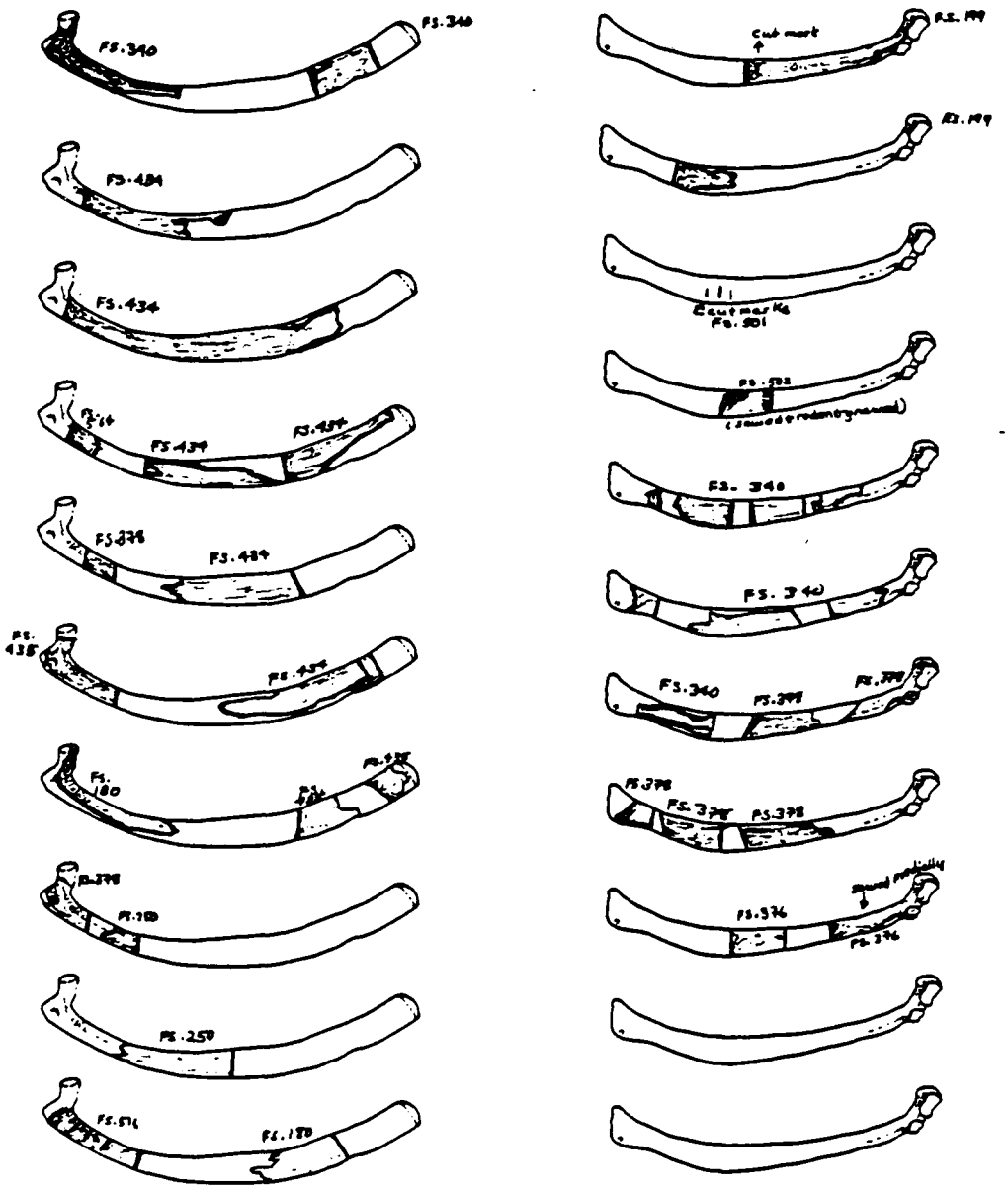


Figure 63, Continued.

Odocoileus virginianus
Femur

Site APDR
Date 6/30/84

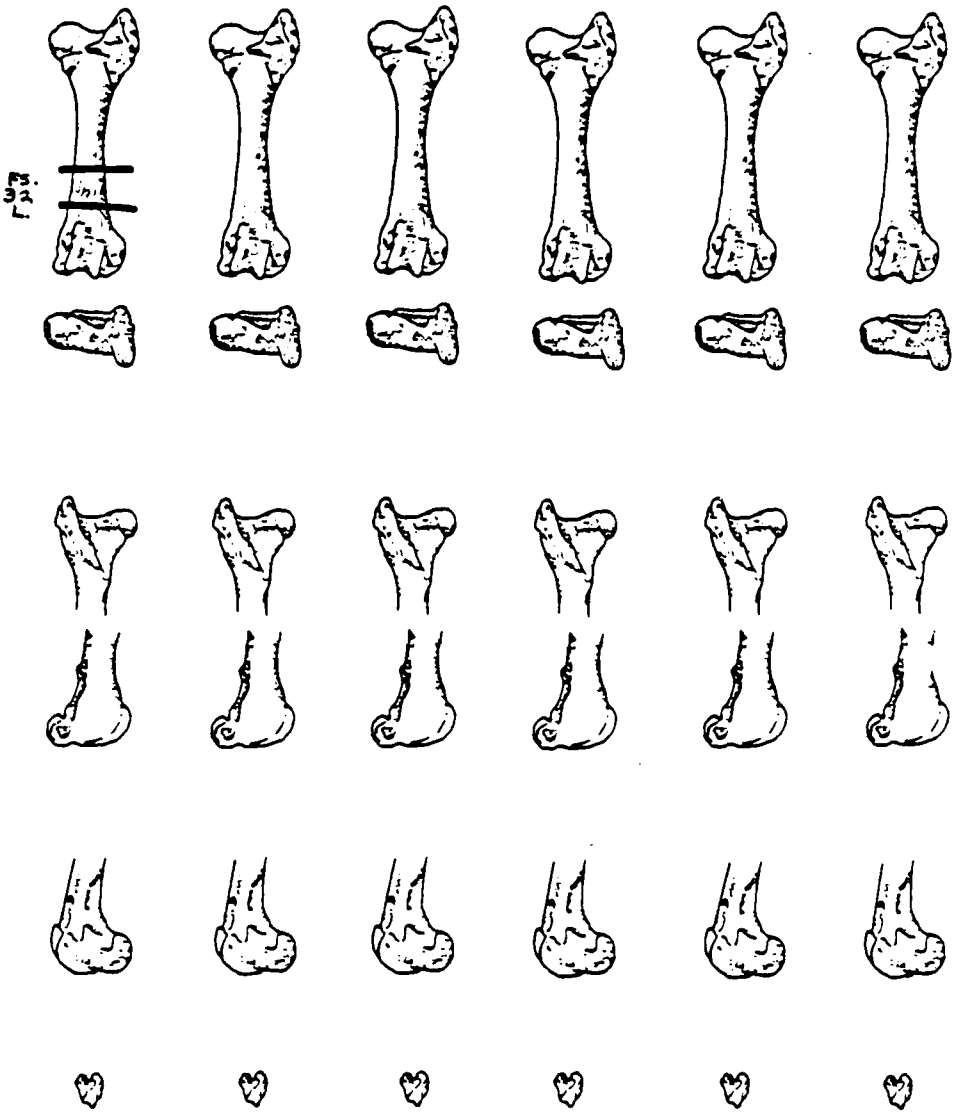


Figure 63, Continued.

Odocoileus virginianus

Radius and Ulna

Site APDR

Date 6/30/84

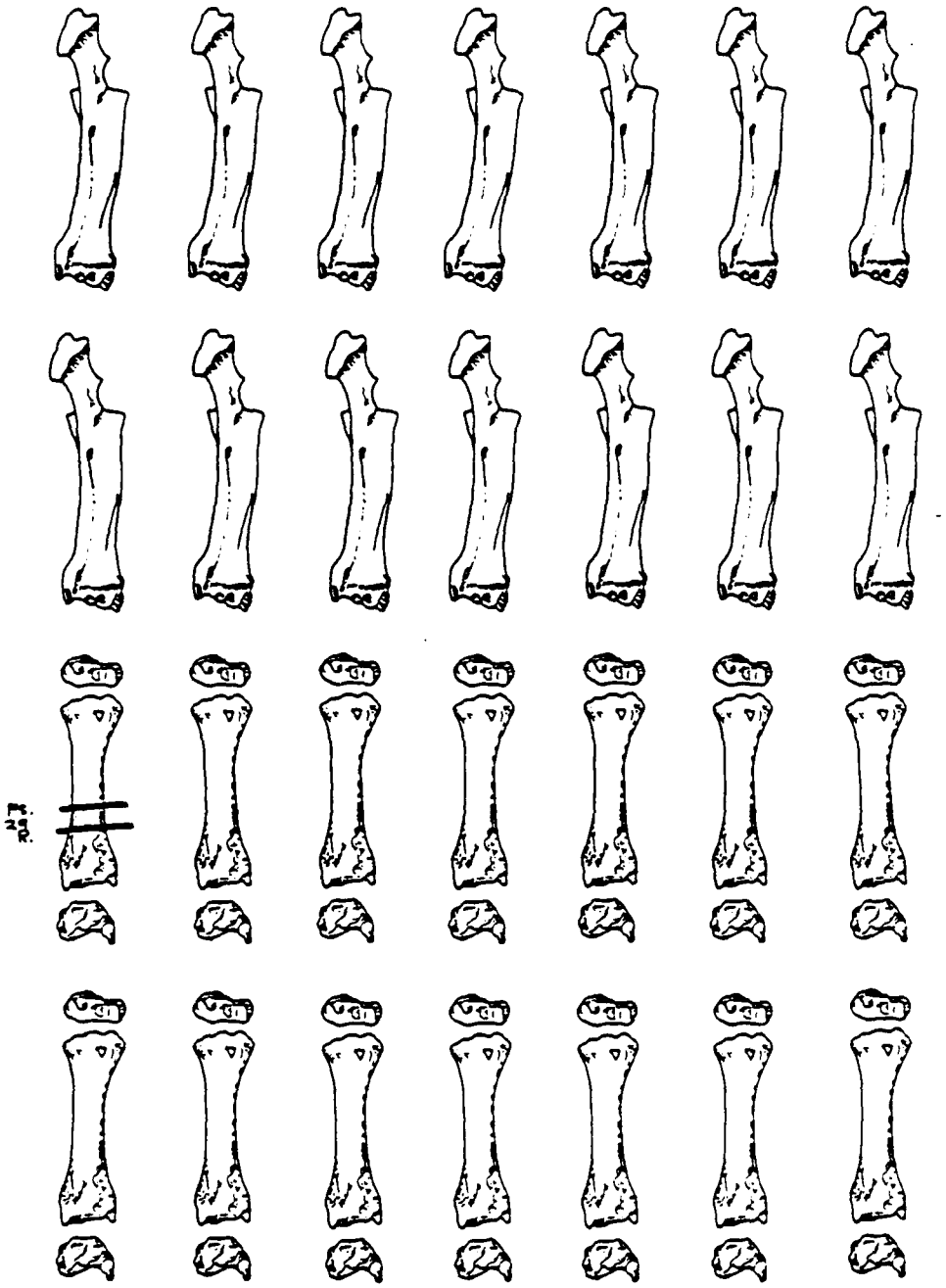


Figure 63, Continued.

Sus scrofa
Calcaneus

Site APDK
Date 7/10/84

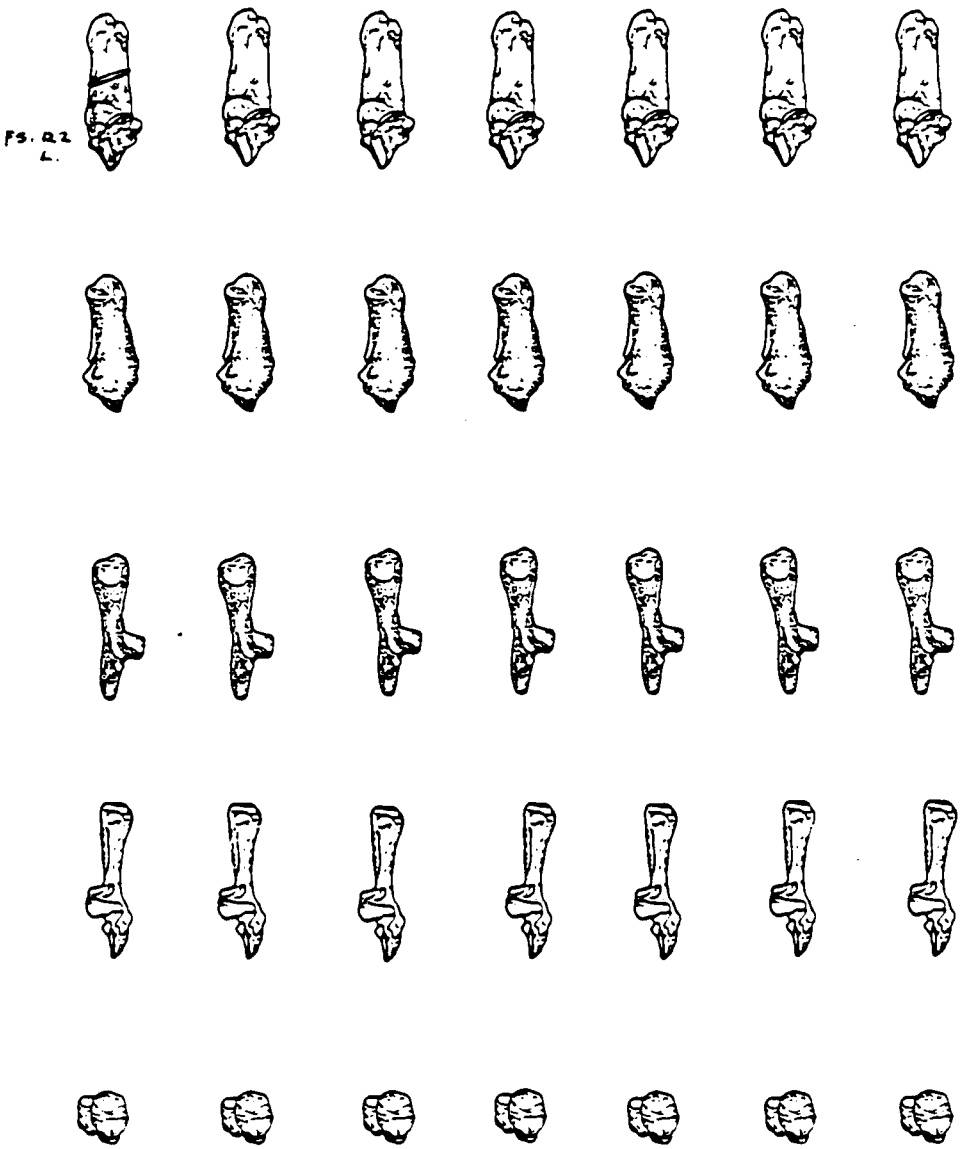


Figure 63, Continued.

Sus scrofa

Metatarsal and Phalanx

Site APDR

Date 7/2/84

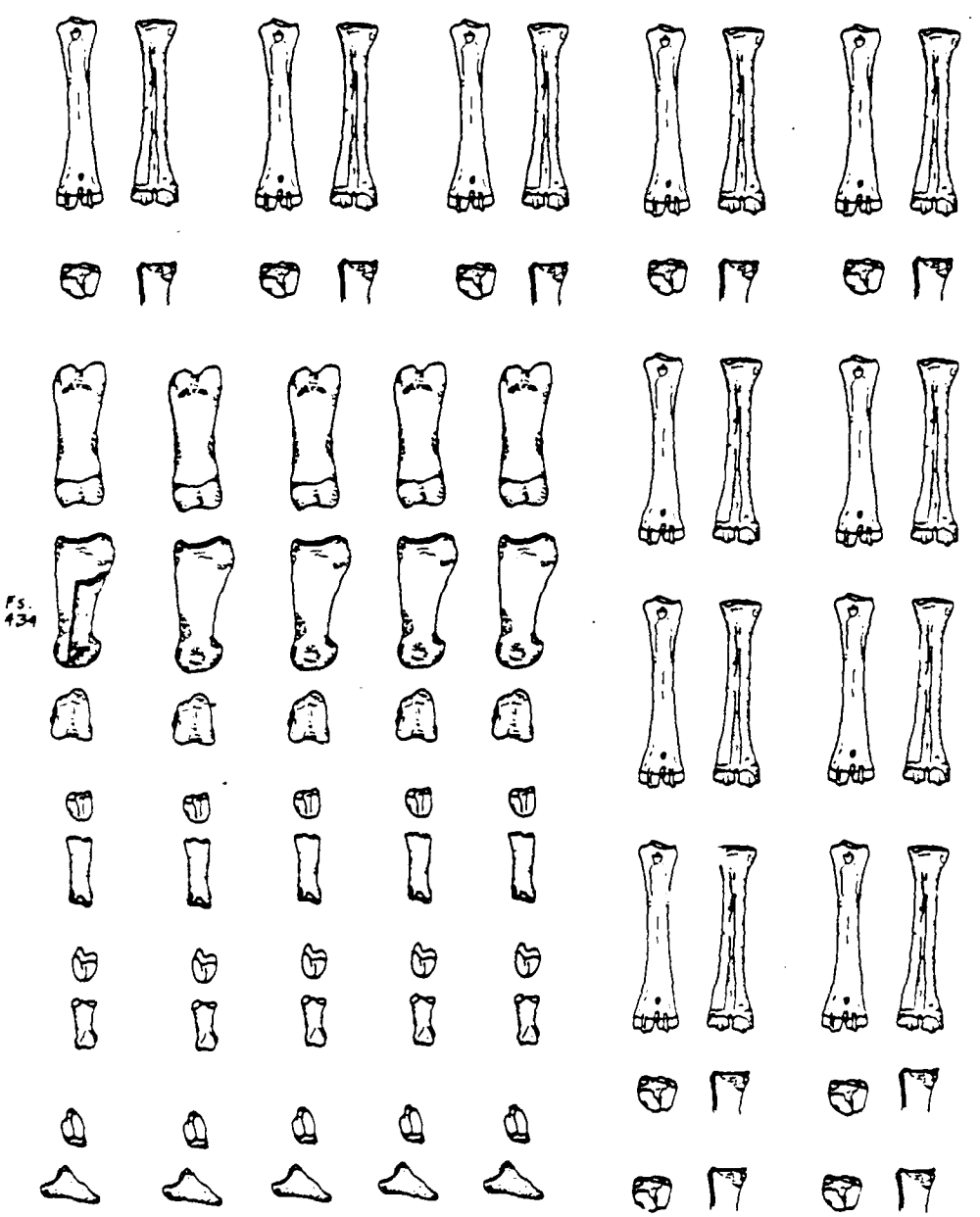


Figure 63, Continued.

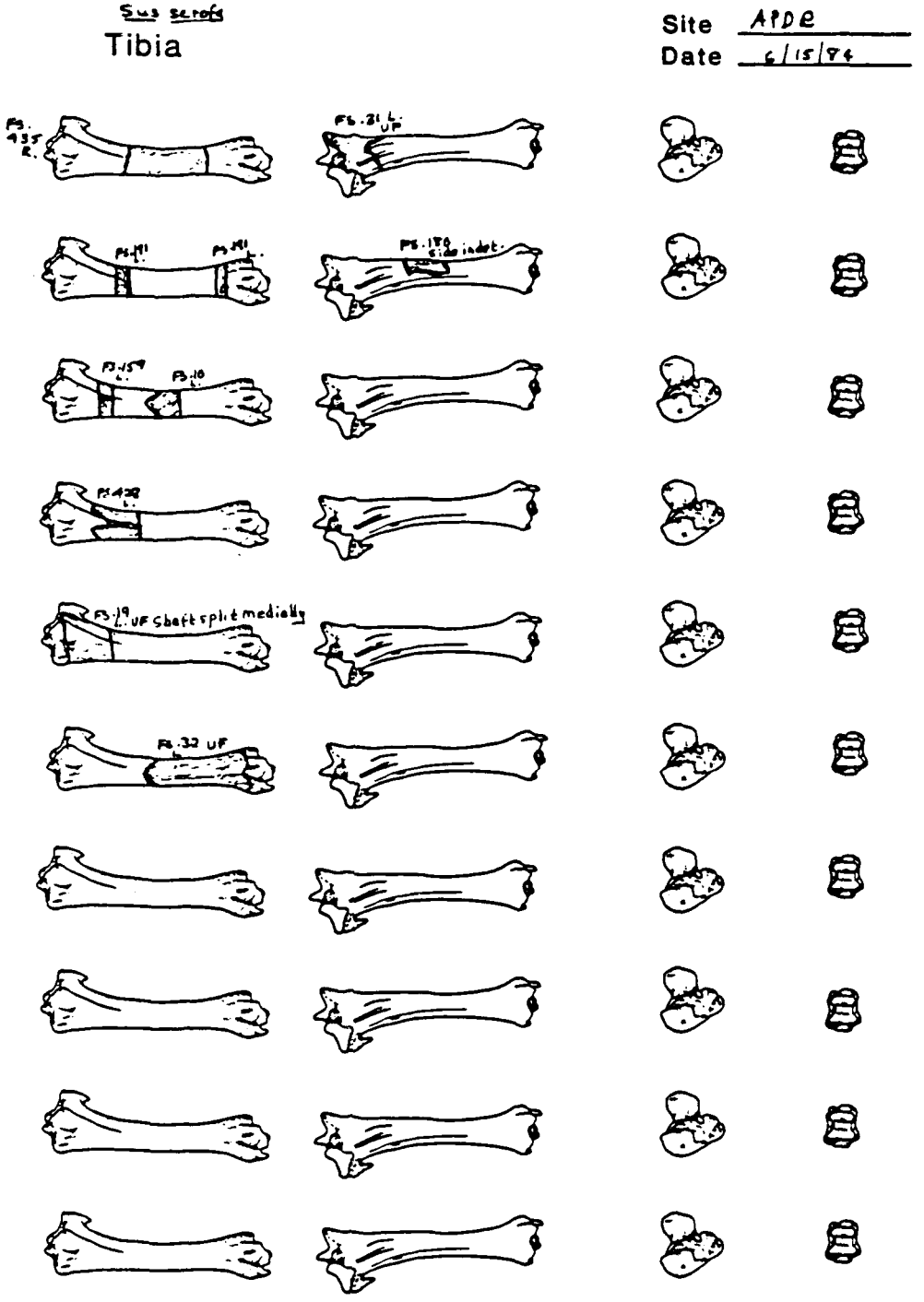


Figure 63, Continued.

Sus scrofa

Femur

Site APDR

Date 6/18/84

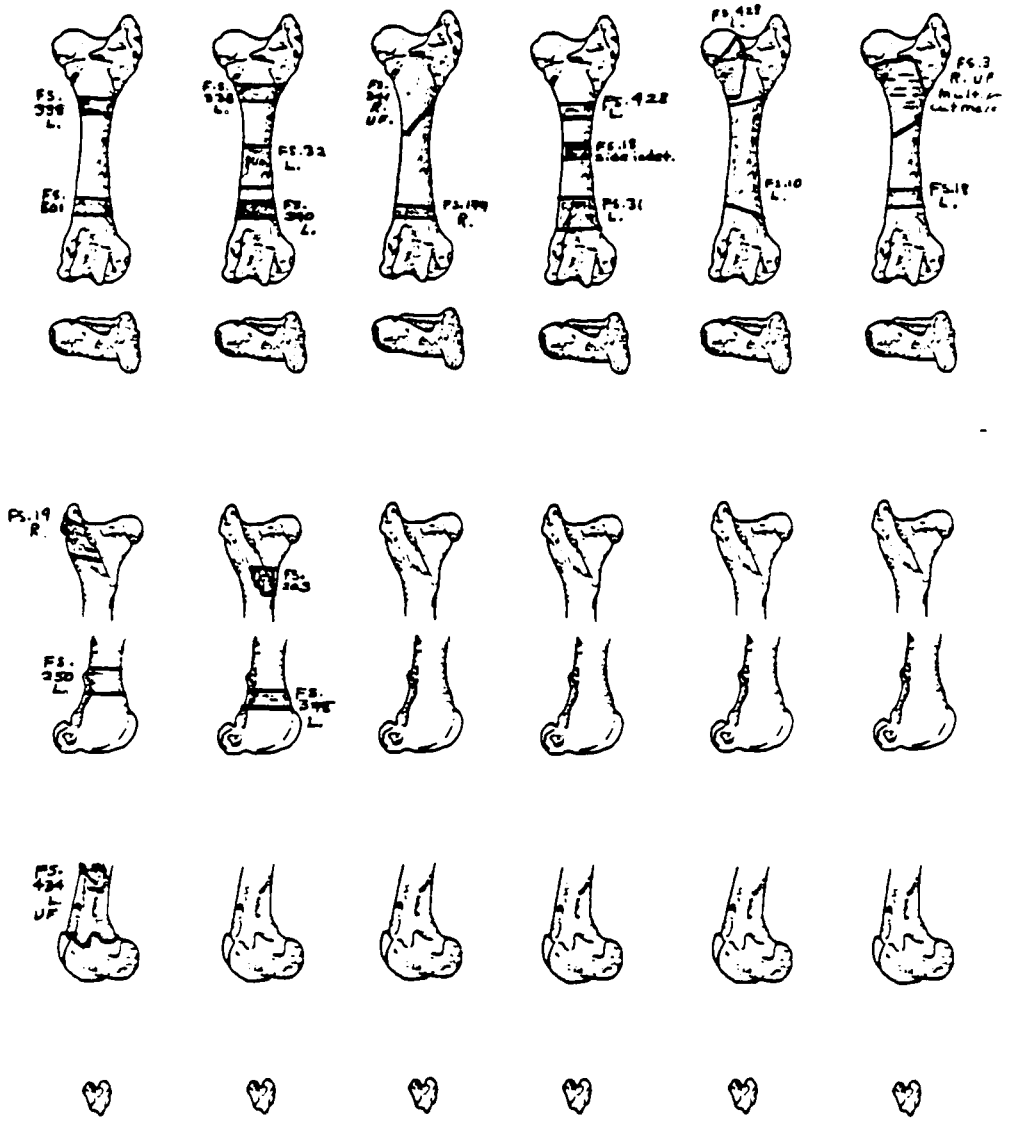


Figure 63, Continued.

Sus scrofa

Innominate and Sacrum

Site APDR

Date 6/25/84

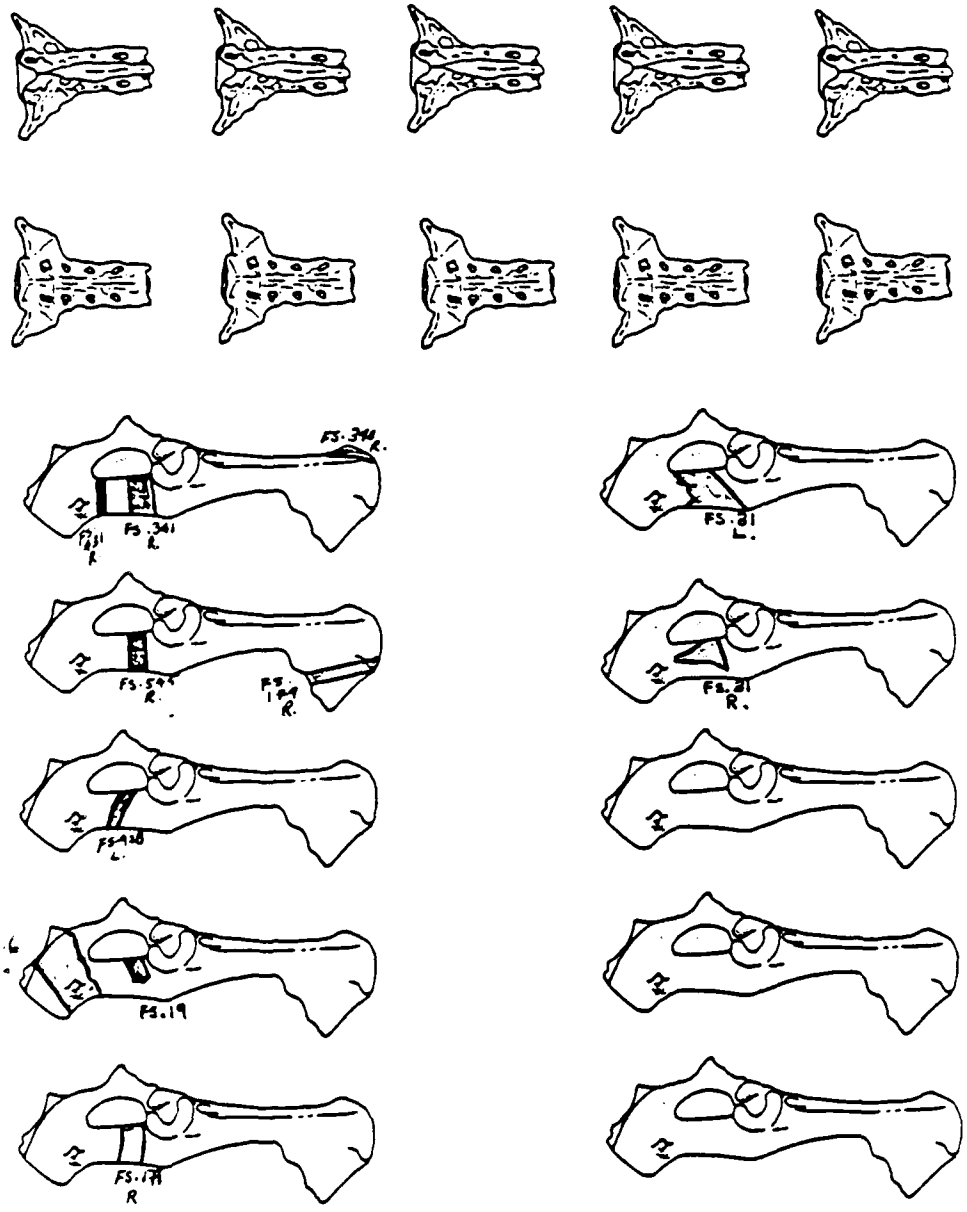


Figure 63, Continued.

Sus scrofa
Ulna

Site APDR
Date 6/30/84

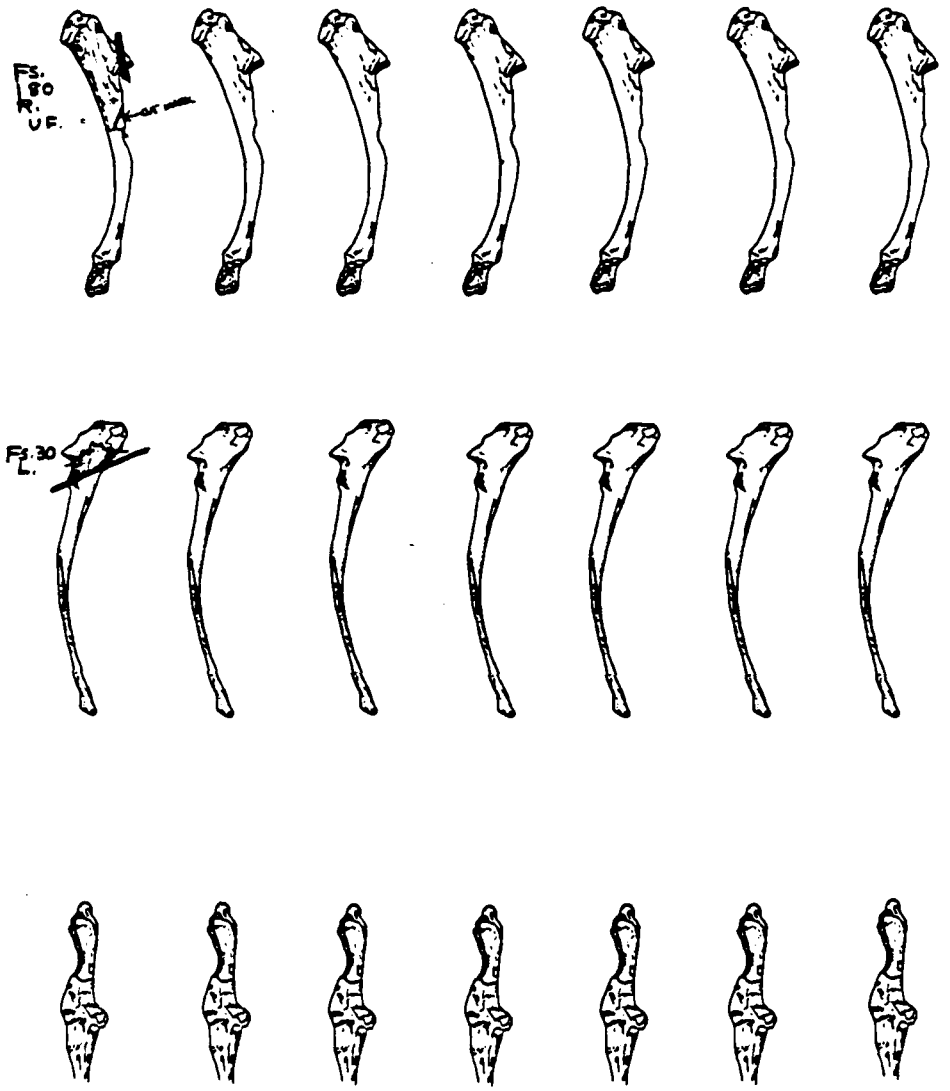


Figure 63, Continued.

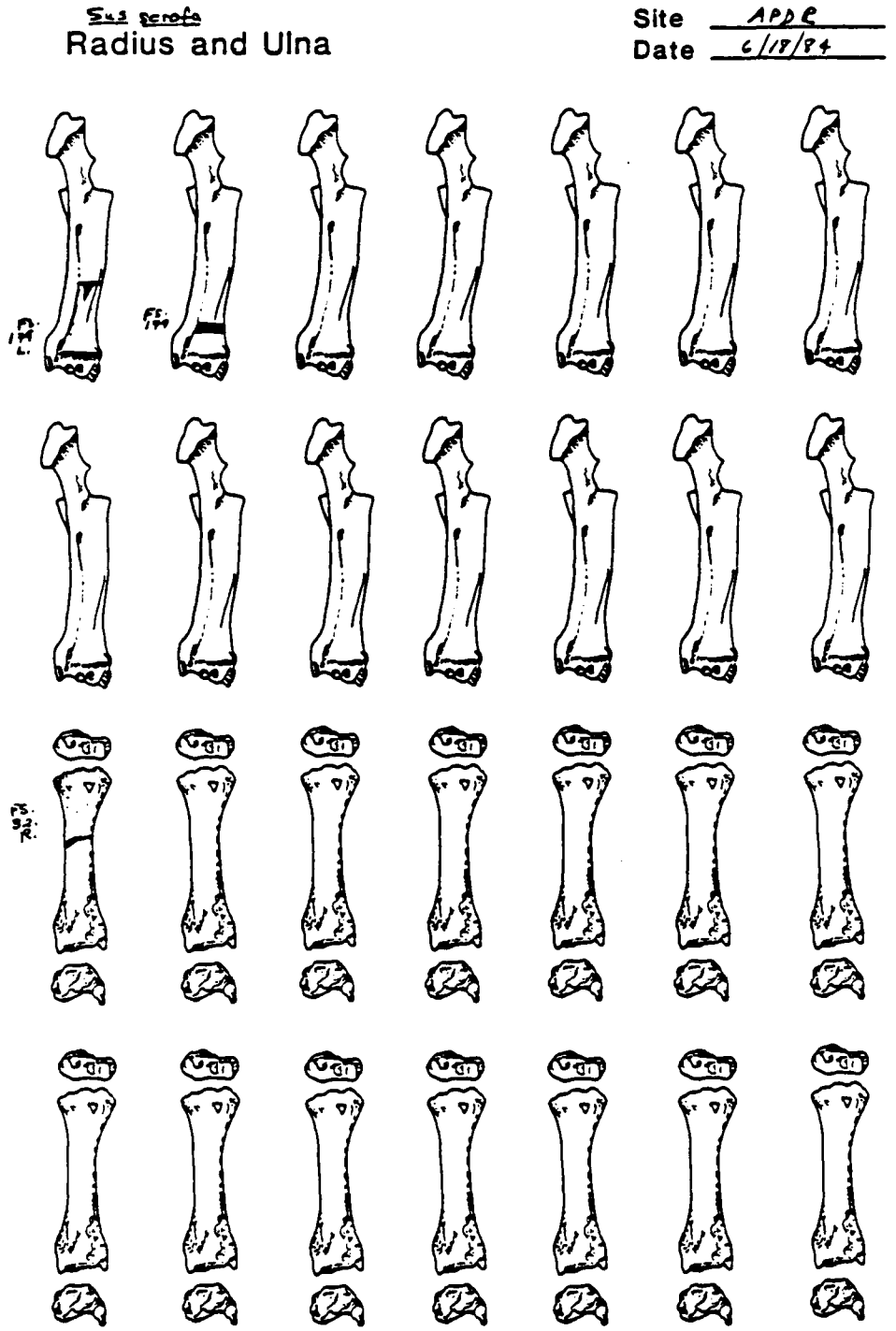


Figure 63, Continued.

Sus scrofa
Humerus IX

Site APDR
Date 7/20/84

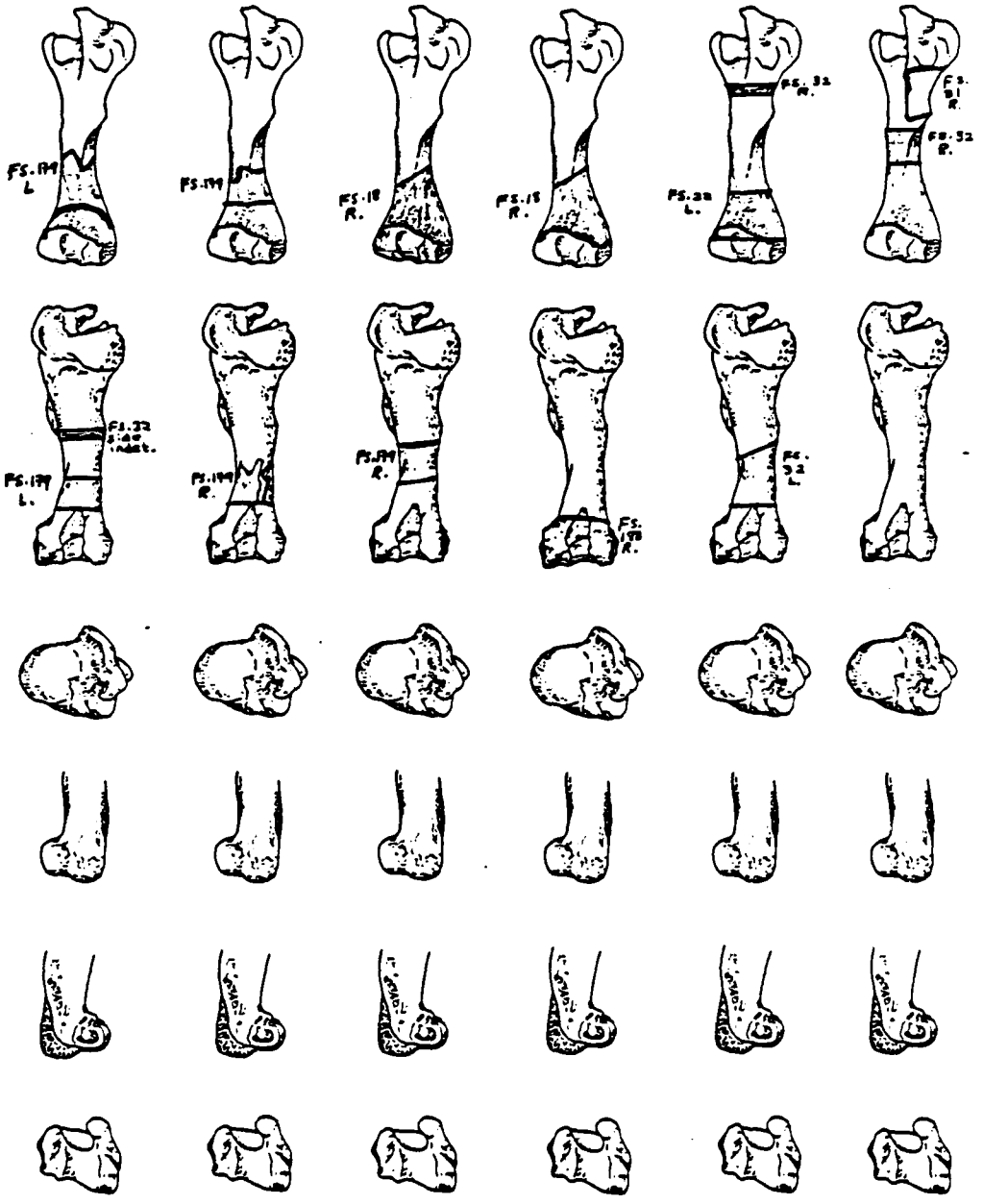


Figure 63, Continued.

Sus scrofa

Humerus I

Site APDR

Date 6/26/84

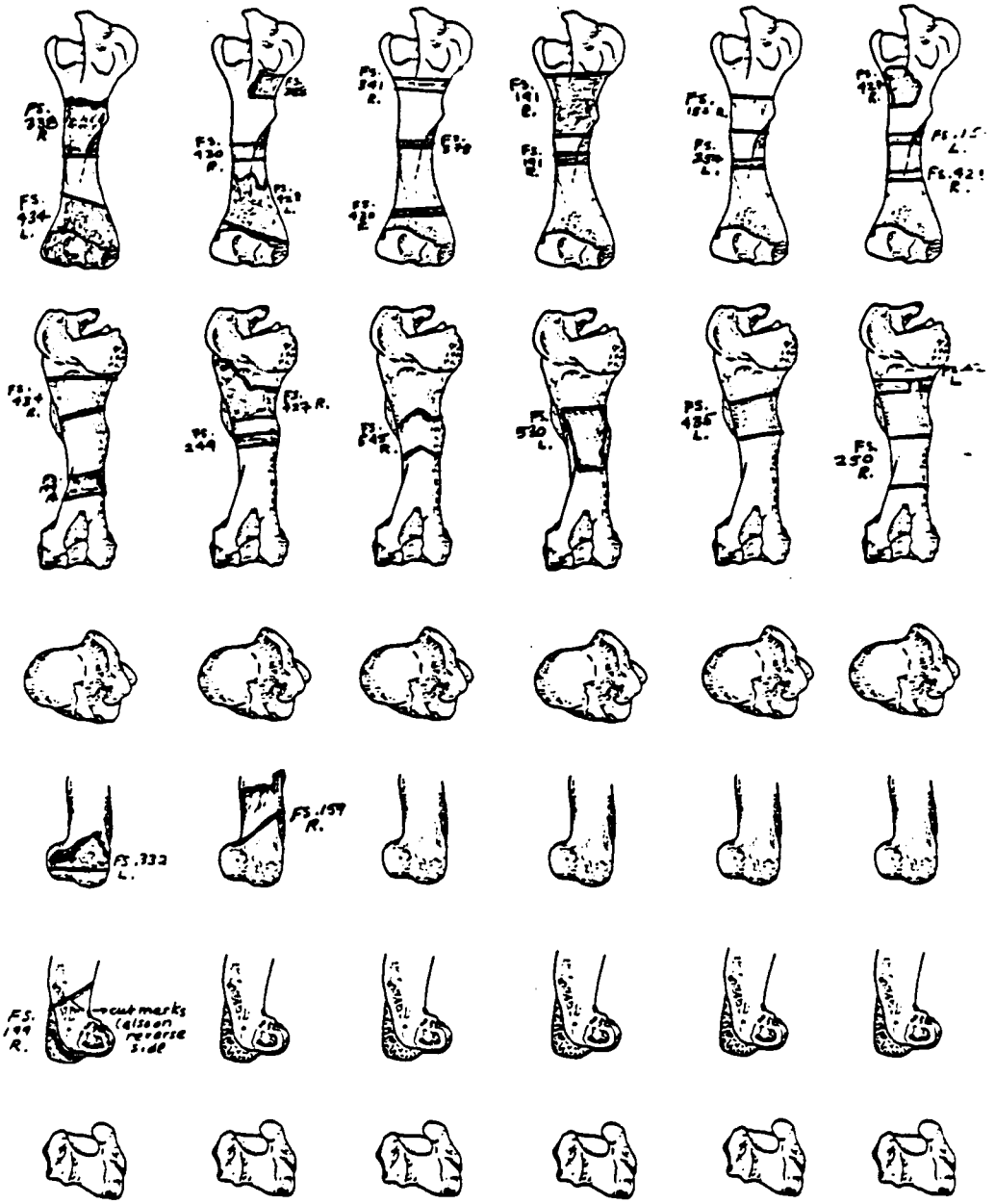


Figure 63, Continued.

Sus scrofa

Scapula

Site APD1P

Date 6/18/84

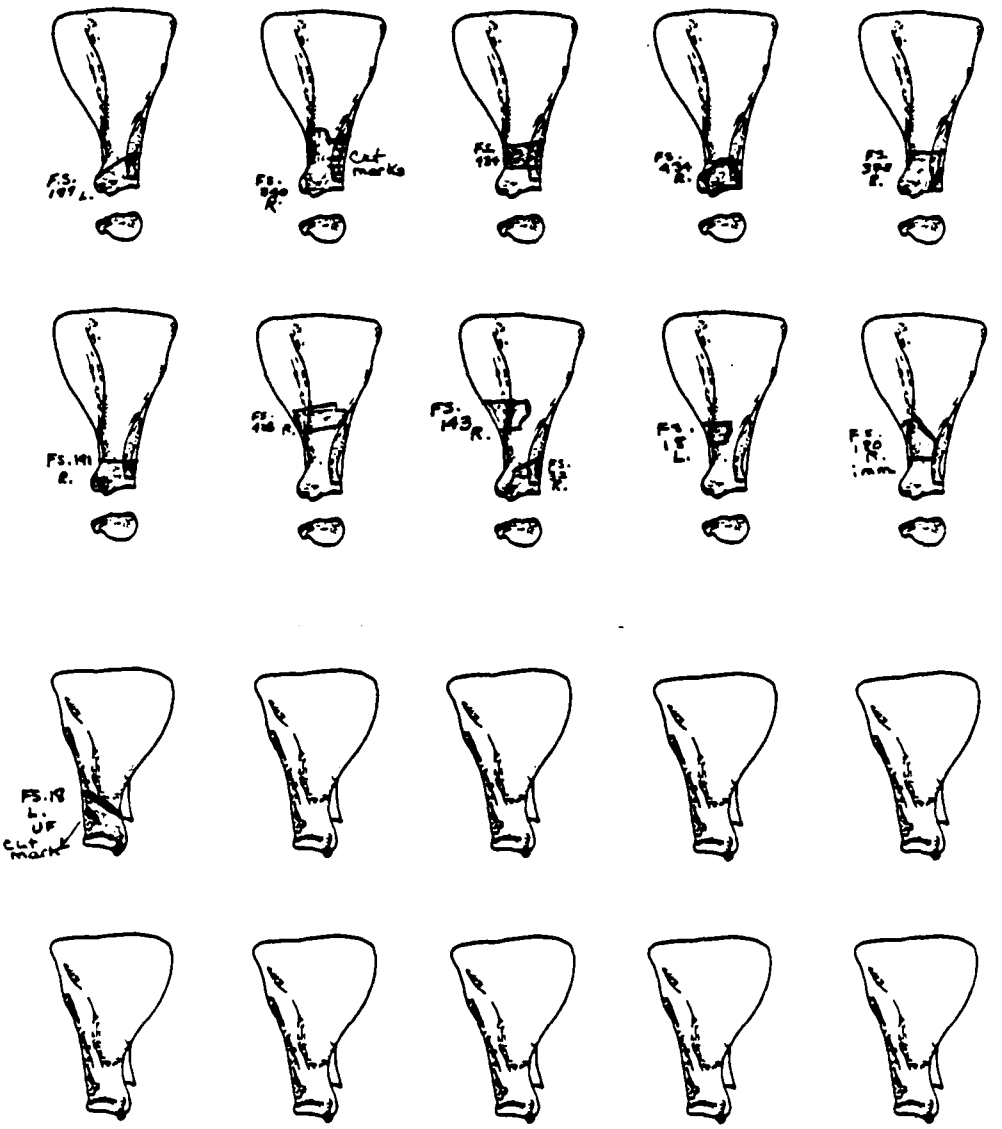


Figure 63, Continued.

Sus scrofa
Ribs

Site APDR
Date 6/26/84

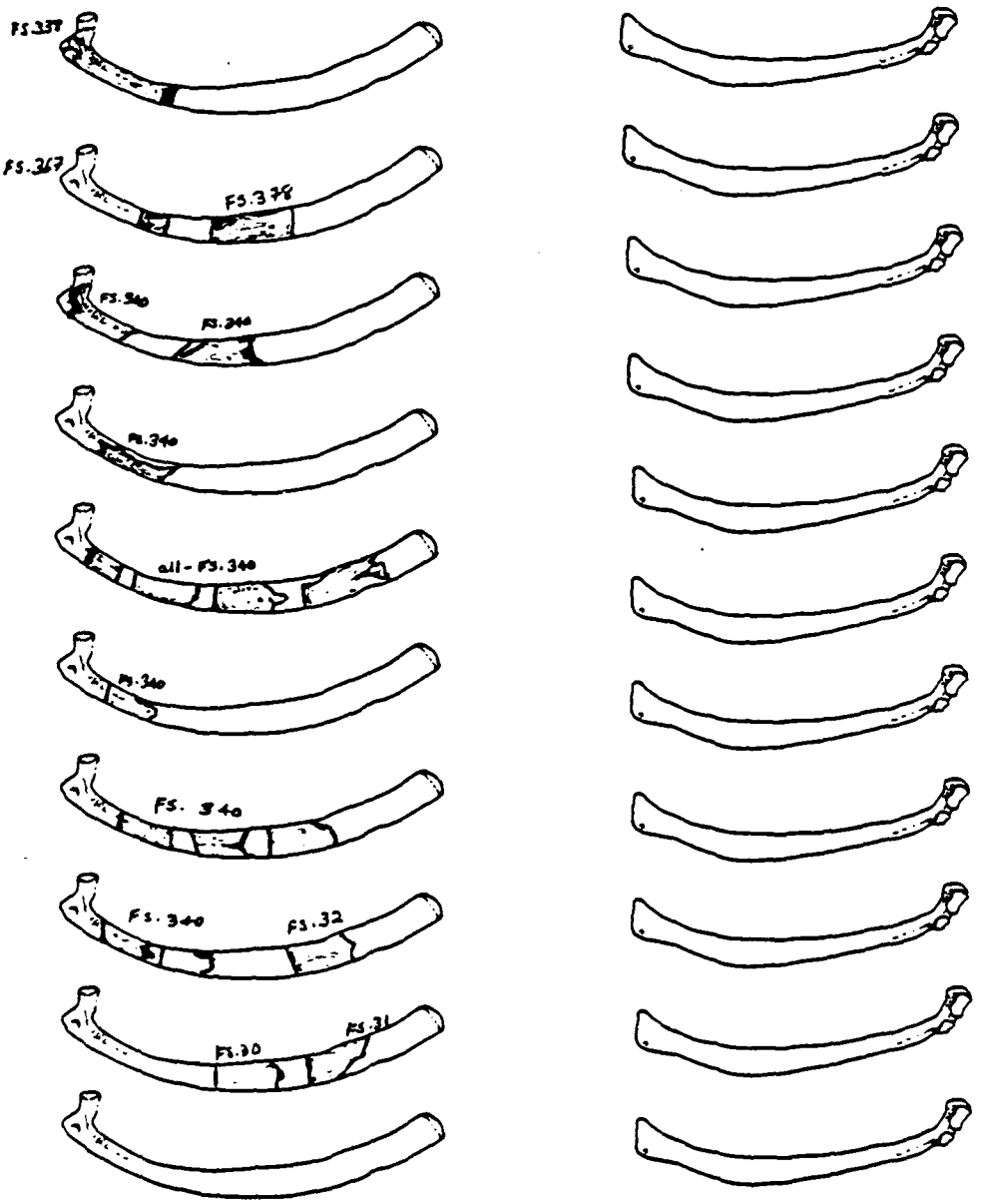


Figure 63, Continued.

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